



IT POWER SOLUTIONS

Innovative products for the IT infrastructure

It's electric.

**BACH
MANN**

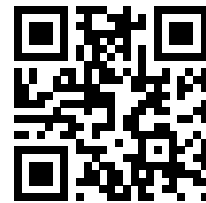
Bachmann Power Solutions

Systematic power distribution

Forty years of experience in developing, manufacturing and distributing power distribution solutions. True to this history, BACHMANN is synonymous with high-quality and innovative electronics and high measurement accuracy, packaged in extremely robust aluminium housings. We provide solutions in IT energy distribution. Our intelligent and modular product range provides great peace of mind. The PDU Basic power distribution unit and Bachmann's BlueNet products meet all key requirements for future-proofed, highly efficient energy distribution, especially for data centres.

Bachmann power distribution provides various solutions for this sector:

- New and intelligent energy distribution systems
- Upgrading of existing energy distribution systems
- Combination of existing PDUs and Bachmann Power Distribution products.



For more information, please visit www.bachmann.com



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Intelligent distributors for metering (retrofit solutions)

Power metering via local display and network

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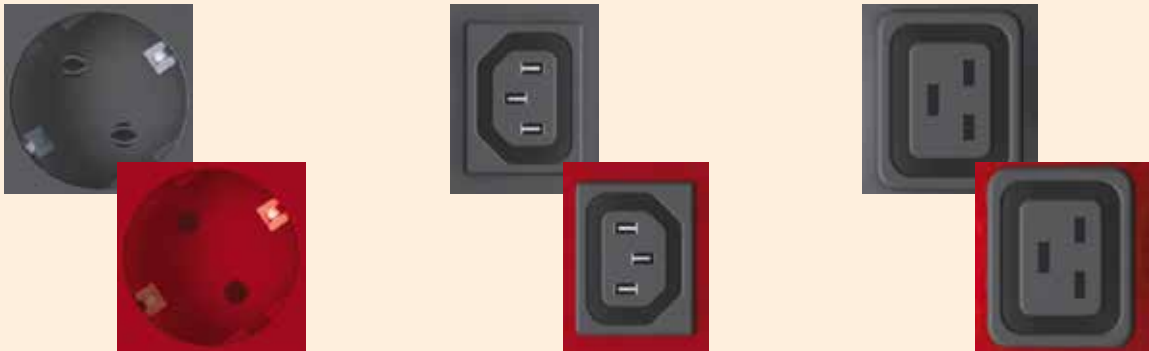
Connecting cable C13 / C14 / C19 / earthing contact plug

Shift inhibitor

Data cables



Modular PDU inserts



Bachmann IT power distribution

For future-proofed, highly efficient energy distribution in your data centre



In our IEC320 C13 power strips, the C14 plugs can be reliably locked with a PVC clip.



The
advantages
at a glance

- Customised solutions in series quality possible
- Country-specific designs possible
- Certified and tested technology
- Extremely compact design
- Very high power density



Integration of devices installed in series

RCD (residual current protection device)



RCD is the internationally recognised abbreviation for **R**esidual **C**urrent **P**rotective **D**evice.

If an insulation error causes a dangerous contact voltage, RCDs have the job of interrupting all the poles on operating equipment within 0.2 or 0.4s.

RCM (residual current monitor)



RCM is the internationally recognised abbreviation for **R**esidual **C**urrent **M**onitor.

The use of an RCM allows drops in the level of insulation (creepage / leakage currents) of a power supply to be detected during operation before a high residual current causes protective devices to trip.



- Customised solutions in series quality possible
- Integration of up to 2 HP (36mm) wide devices installed in series
- Selective, extremely compact fusing in the rack possible
- Use of RCD systems (residual current circuit breakers) possible
- Use of RCM systems (residual current monitoring) possible
- Integration of pulsed current meter possible

The
advantages
at a glance



Bachmann IT power distribution

A safe connection

IEC320 C13 lockable

Two locking clips to secure two power cables.
IEC320 C13 with IEC lock can be supplied.



IEC320 C19 with IEC lock

The IEC lock system protects computers, as servers and electrical equipment can become accidentally disconnected due to vibrations.

The
advantages
at a glance

- Plugs locked using PVC clip or IEC lock.
- Costs cut through use of server connection cables supplied.
- Maximum availability
- No unintentional disconnection of the power supply and therefore the best plug contacts

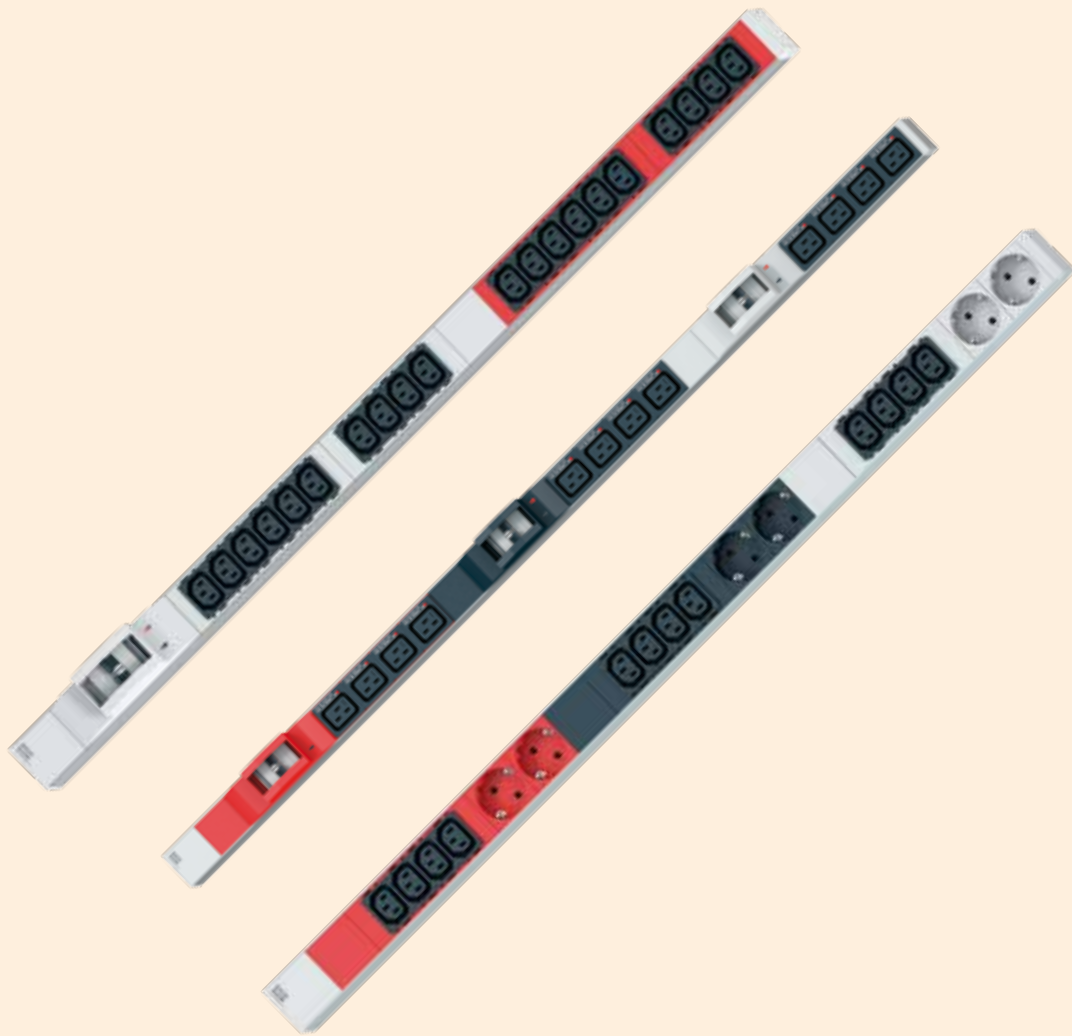


High-quality aluminium housing



- Space-saving integration of PDU in the server rack with scope for modular add-ons
- High-quality and very robust aluminium profile
- Extremely compact dimensions of 44 x 47 mm. This therefore provides plenty of space for data cabling and ventilation for cooling the server rack
- Simple insertion mechanism using links of the IT-PDUs, making it easy to combine various different plug versions

The
advantages
at a glance



Basic PDU Vertical

Power distribution units 230 - 400 V / 50 Hz

Development of the IT PDU focused on space-saving PDU integration in the server rack with scope for modular expansion. The high-quality and very robust aluminium profile measures a compact 44 x 47 mm. The space-saving design therefore provides space for data cabling and ventilation for cooling the server rack.

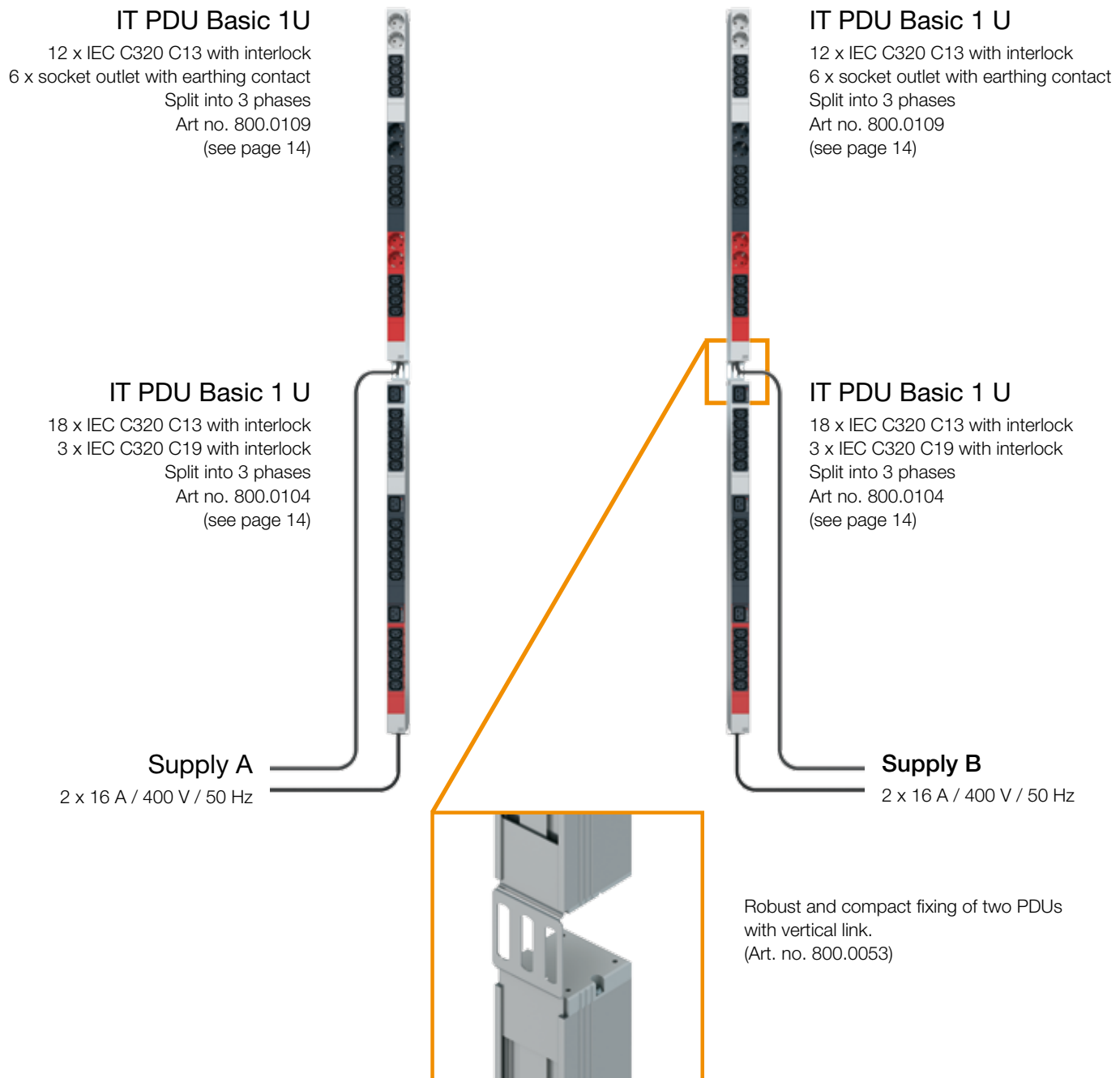
The IT PDUs can be linked together by a simple insertion mechanism, allowing various different plug versions to be combined.

The advantages at a glance

- Very high packing density (96 A per side)
- Very good MTTR (mean time to repair)
- Space-saving (depth: 47 mm)
- Maximum availability thanks to total physical and electric separation
- Lockable C13 and C19 sockets
- Phases identified by colour

Sample rack configuration

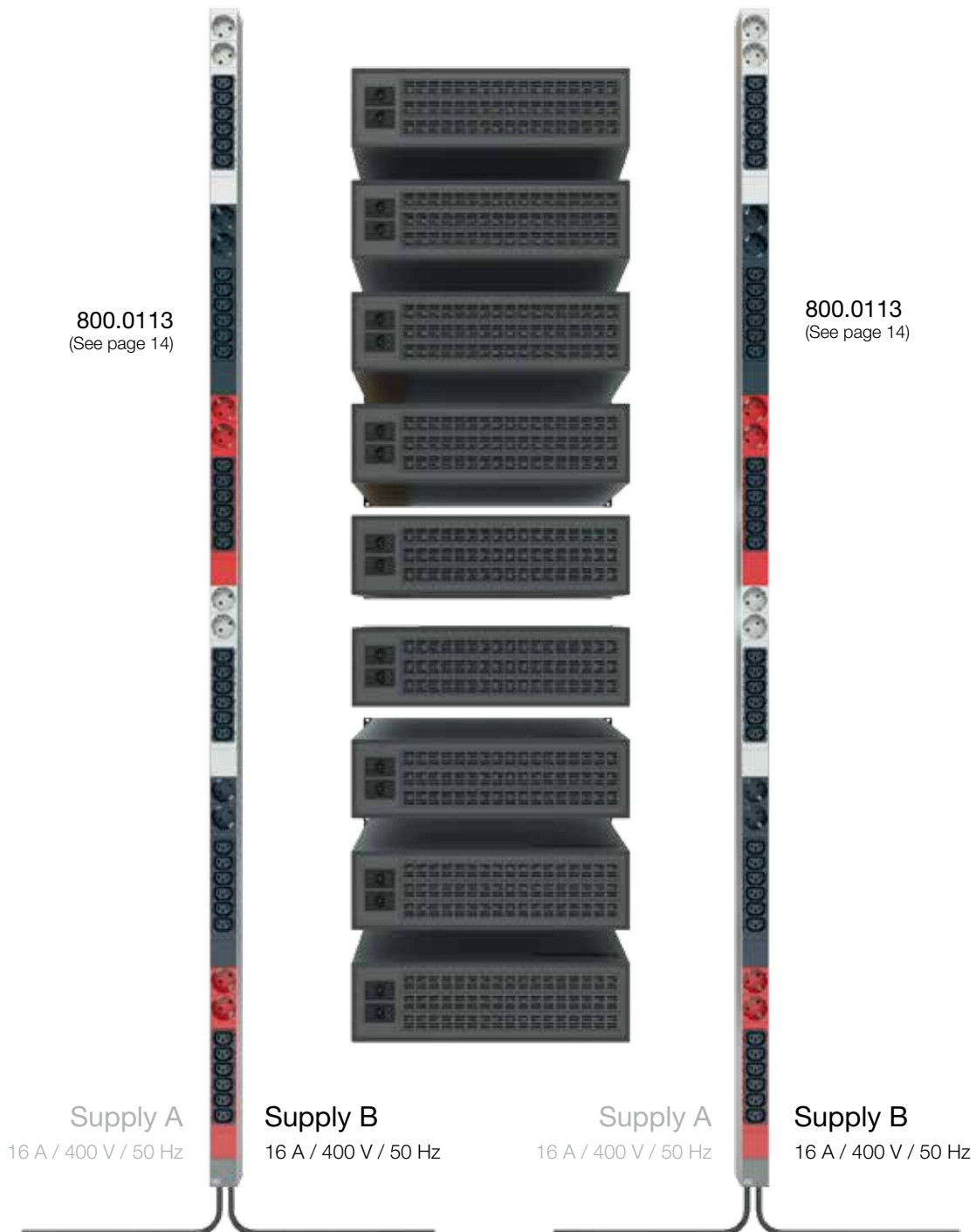
Sample system for $4 \times 3 \times 16\text{A} / 400\text{V} = 44\text{KW}$ (11KW per Basic PDU)



High density rack

Sample system for $4 \times 3 \times 16 \text{ A} / 400 \text{ V} = 44 \text{ kW}$ (11 kW per feeder unit)

Basic PDU 16 A / 400 V / 50 Hz



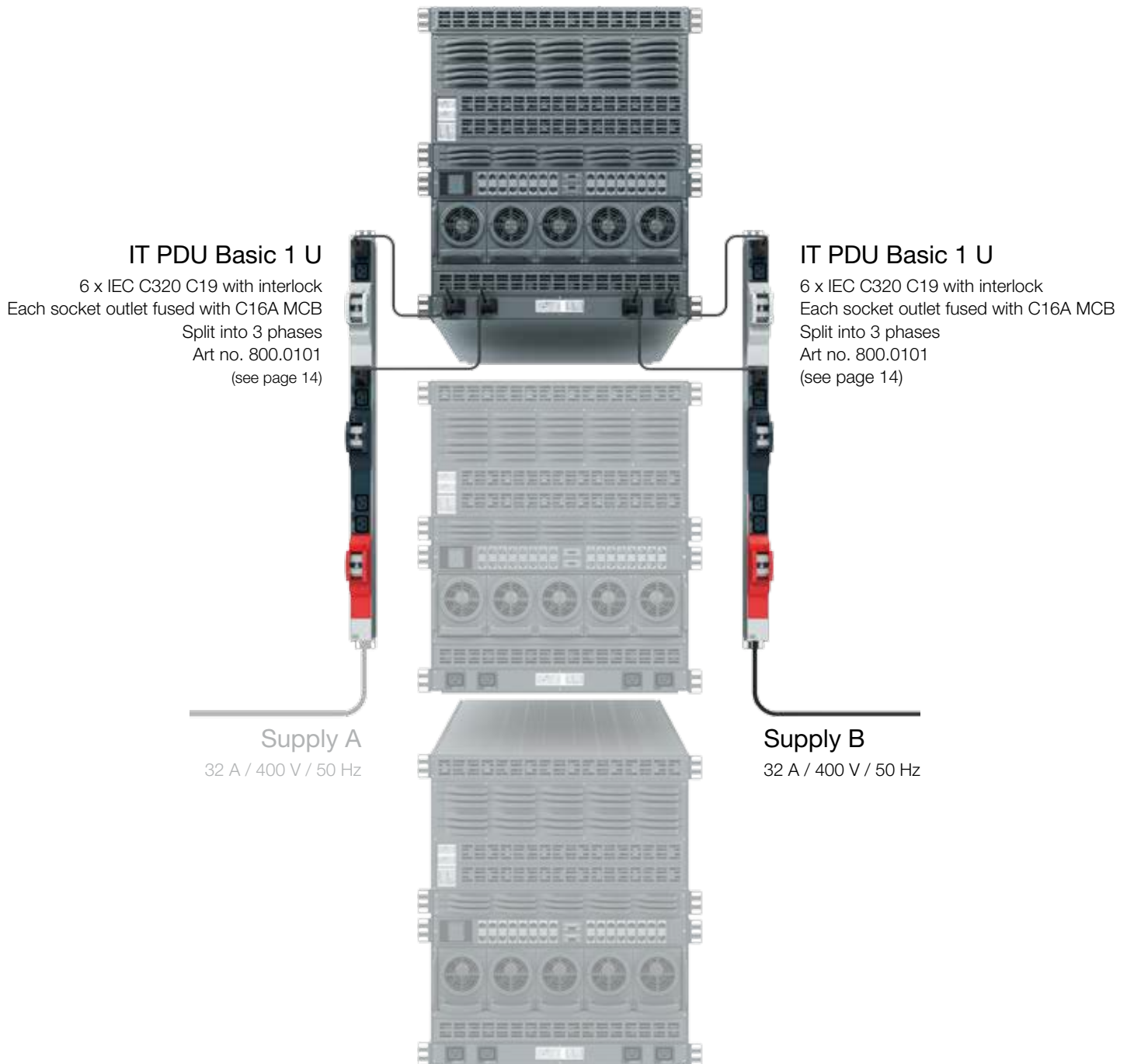
The
advantages
at a glance

- PDU with double infeed to increase performance or map redundancies.
- Two galvanically isolated C20 infeeds (16-32A / 230-400V)

Blade center rack

Sample system for $2 \times 3 \times 32\text{A}/400\text{V} = 44\text{kW}$ (22kW per Basic PDU)

Basic PDU 32 A / 400 V / 50 Hz



- Little wiring work
- Rack with protection from accidental switching
- Selective protection structure
- Redundant power supply, specially for high ratings (22 kW / PDU)
- Compact PDU construction

The
advantages
at a glance

Basic PDU Vertical

Power distribution units 230 - 400 V / 50 Hz

Article number	Cable type H05VV-F-	Length (m)	Plug	Phases	Rated voltage (V)	Current per phase in A	Miniature circuit breaker C16A	C13	C13 IEC lock	C19 IEC lock	SOEC*	Outlets in total	Dimensions (WxHxD) in mm	from stock
19" IT PDU Basic (3 x 16 A / 400 V / 50 Hz)														
800.0111	5G 2.5 mm ²	3	CEE	3	400	16			6			6	482.6x44x47	yes

Zero U-Space IT PDU Basic (16 A / 230 V / 50 Hz)														
800.1657	3G 2.5 mm ²	3	CEE	1	230	16		24		3		27	1075x44x47	yes
Zero U-Space IT PDU Basic (32 A / 230 V / 50 Hz)														
800.0119	5G 4 mm ²	3	CEE	1	230	32	2	20				20	778x44x47	yes

Zero U-Space IT PDU Basic 3x (16 A / 400 V / 50 Hz)														
800.0104	5G 2.5 mm ²	3	CEE	3	400	16		18		3		21	821x44x47	yes
800.0105	5G 2.5 mm ²	3	CEE	3	400	16		18				18	821x44x47	yes
800.0107	5G 2.5 mm ²	3	CEE	3	400	16					15	15	821x44x47	yes
800.0109	5G 2.5 mm ²	3	CEE	3	400	16		12			6	18	821x44x47	yes

800.1656	5G 2.5 mm ²	3	CEE	3	400	16		24		3		27	1075x44x47	yes
800.0113	2x5G 2.5 mm ²	2x3	2x CES*	6	400	16		36			12	48	1840x44x47	yes
800.0114	2x5G 2.5 mm ²	2x3	2x CES*	6	400	16		48				48	1840x44x47	yes

Zero U-Space IT PDU Basic 3x (32 A / 400 V / 50 Hz)														
800.0100	5G 4 mm ²	3	CEE	3	400	32	6			12		12	1075x44x47	yes
800.0101	5G 4 mm ²	3	CEE	3	400	32	6			6		6	820x44x47	yes
800.0102	5G 4 mm ²	3	CEE	3	400	32	6	36				36	1586x44x47	yes

Accessories

Mounting brackets for VM profile variant / Zero U-Space installation

- Power strip is fixed by insertion into the profile groove provided.
- No additional screws required.

Art. no. | Version

1 U mounting brackets

Zero-U Space

940.143 | · Mounting brackets left and right

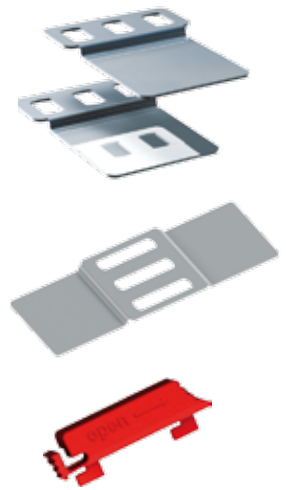
1 U link

Zero-U Space

800.0053 | · For connecting two vertically fitted PDUs

Locking clips

940.103 | · Red locking clip for IEC320 appliance socket outlets C13, supplied in packs of 12.



Cables in various colours to distinguish between power supplies



Art. no.	Cable colour	Article no.	Cable colour	Cable cross-section mm ²	Cable length (m)	Plug	Coupling
356.119	black	356.900	grey	1.0	0.50	C14	C13
356.169	black	356.901	grey	1.0	0.75	C14	C13
356.120	black	356.902	grey	1.0	1.00	C14	C13
356.170	black	356.903	grey	1.0	1.50	C14	C13
356.171	black	356.904	grey	1.0	2.00	C14	C13
356.172	black	356.905	grey	1.5	0.50	ECP*	C13
356.1721	black	356.906	grey	1.5	0.75	ECP*	C13
356.1722	black	356.907	grey	1.5	1.00	ECP*	C13
356.1723	black	356.908	grey	1.5	1.50	ECP*	C13
356.1724	black	356.909	grey	1.5	2.00	ECP*	C13
356.1731	black	356.910	grey	1.5	0.50	C20	C19
356.1732	black	356.911	grey	1.5	0.75	C20	C19
356.1733	black	356.918	grey	1.5	1.00	C20	C19
356.1734	black	356.935	grey	1.5	1.50	C20	C19
356.1735	black	356.936	grey	1.5	2.00	C20	C19
356.1971	black	356.937	grey	1.5	0.50	ECP*	C19
356.1972	black	356.938	grey	1.5	0.75	ECP*	C19
356.1973	black	356.939	grey	1.5	1.00	ECP*	C19
356.1974	black	356.940	grey	1.5	1.50	ECP*	C19
356.1975	black	356.941	grey	1.5	2.00	ECP*	C19





BlueNet

The intelligent, modular
power management system.

It offers a total solution for structuring, controlling and monitoring IT power networks. BlueNet captures consumption and output data and provides the user with relevant data and control options for modern power management.

BlueNet
Efficient Power Management

Energy management

Monitor energy costs with BlueNet. All data, such as current, voltage, power, is depicted by the software and display. Loads can then be distributed so well that failures due to circuit overloads no longer occur. Messages can be triggered automatically by means of adjustable threshold values. Restarts controlled by web link further increase availability and flexibility.

The BlueNet technology can be easily integrated in superordinate infrastructure software solutions using extensive, integrated interfaces.

Safety

Every Bachmann PDU is tested and documented one port at a time using a computer-based test program during production.

Electronic components are continually subject to stress tests to guarantee consistent quality.

BlueNet is only integrated in compact, very robust, yet weight-optimised aluminium housings.

Most of the requirements in relevant standards and guidelines are exceeded.

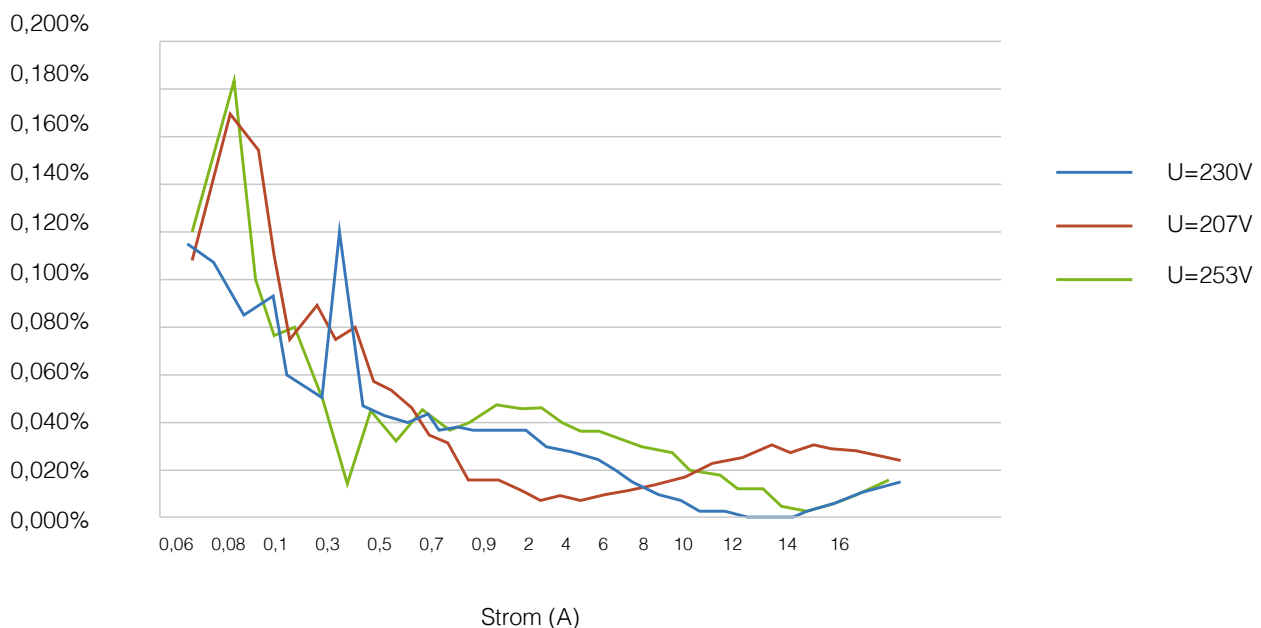
Measurement accuracy deviations of less than 1% (see diagram below).

Energy efficiency

Bachmann BlueNet PDUs save energy. The technology used has some of the lowest consumption levels for intelligent measurement systems during operation in the world.

The modular structure of the BlueNet PDUs guarantees maximum packing density. The tiny amount of space needed by the PDUs leaves room for cabling and air conditioning in the rack! The BlueNet Basic Monitored series is one of the most compact power metering solutions with integrated network and sensor interface anywhere in the world.

Genauigkeit der Wirkleistung bei $PF = 1$ $f = 50\text{Hz}$



BlueNet product matrix



	Metered	Monitored	Monitored PLC	Monitored Inline	Monitored Inline PLC	WiFi Managed	Power unit 2 U / 3 U	BN3000	Switched	Managed
MEASUREMENT										
Current	x	x	x	x	x	x	x	x		x
Voltage	x	x	x	x	x	x	x	x		x
Phase angle	x	x	x	x	x		x	x		x
Frequency	x	x	x	x	x		x	x		x
Effective power	x	x	x	x	x	x	x	x		x
Reactive power		x	x	x	x		x	x		x
Apparent power		x	x	x	x	x	x	x		x
Energy meter	x	x	x	x	x	x	x	x		x
Power factor		x	x	x	x	x	x	x		x
Neutral conductor monitoring		x	x	x	x		x	x		x
Measurement per phase	x	x	x	x	x	x	x	x		x
Measurement accuracy	1%	1%	1%	1%	1%	1%	1%	1%		1%
DISPLAY										
Type	LCD	TFT	TFT	TFT	TFT	–	LCD	OLED		LCD
Display can be rotated using software		x	x	x	x			x		
SENSORS										
Connections for external sensors		2	2	2	2	1		2		
Socket outlets can be switched						x			x	x
Switching status check						x			x	x

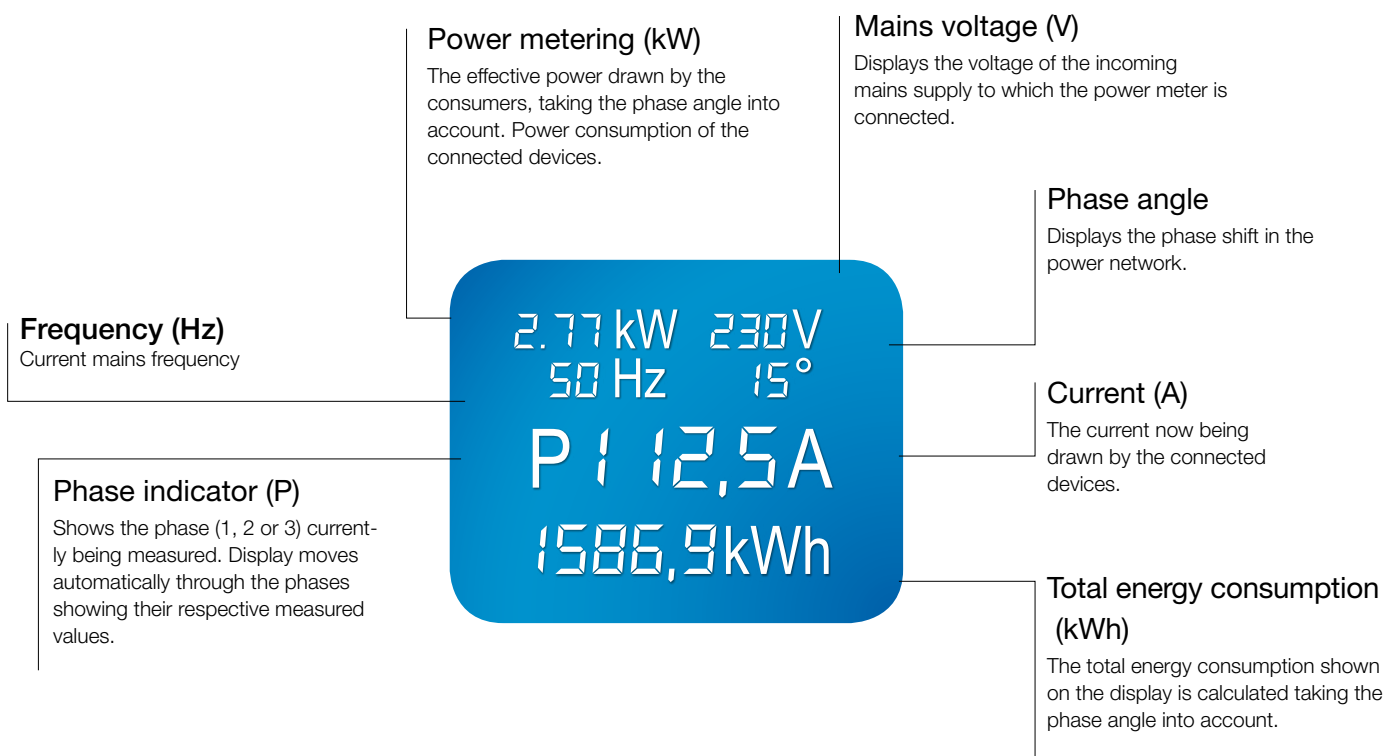


	Metered	Monitored	Monitored PLC	Monitored Inline	Monitored Inline PLC	WiFi Managed	Power unit 2 U / 3 U	BN3000	Switched	Managed
SWITCHING										
Timer function						x				
Threshold value switching function						x				
COMMUNICATION										
Ethernet (10/100 Mbit/s)		x	x	x	x	x	x	x	x	x
W-LAN 802.11 b/g/n						x				
Powerline Communication			x		x					
ModBus RTU								x		
ModBus TCP							x	x	x	x
HTTP		x	x	x	x	x	x	x	x	x
HTTPS						x	x	x	x	x
SSH							x	x	x	x
DHCP		x	x	x	x	x	x	x	x	x
SMTP						x	x	x	x	x
SNMPv2		x	x	x	x		x	x	x	x
SNMPv3								x		
SNMP Trap							x	x	x	x
Syslog		x	x	x	x		x	x	x	x
NTP		x	x	x	x	x	x	x	x	x
DDNS						x				
OPERATION										
Web browser		x	x	x	x	x	x	x	x	x
Smartphone app						x				
Local		x	x	x	x			x		



BlueNet Metered & Metered Plus

Current and power metering via local display



The
advantages
at a glance

- Current measurement
- Voltage measurement
- Phase angle measurement
- Effective power calculated with regard to phase angle
- Frequency measurement
- BlueNet display
- Accuracy class 1

BlueNet Metered (16 A / 230 V / 50 Hz)

- Integrated current measurement for up to 32 A (depending on version)
- 3-digit current readout on illuminated LCD
- Measurement accuracy +/- 1%
- End caps riveted and do not open
- Includes mounting brackets and screws
- Plastic light grey, aluminium profile silver



Art. no. | Version | Dimensions (L x W x H)

BlueNet Metered			
integrated ammeter, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact			
333.808	7 socket outlets with earthing contact	approx. 482.6 x 44 x 58	
333.810	8 IEC320 sockets C13	approx. 482.6 x 44 x 58	
333.862	7 IEC320 C19 sockets	approx. 482.6 x 44 x 58	
333.864	7 UTE socket outlets	approx. 482.6 x 44 x 58	
integrated ammeter, 2.0 m H05VV-F 3G 1.00 mm², black, with CH plug type 12			
333.0422	7 CH socket outlets type 13	approx. 482.6 x 44 x 58	

BlueNet Metered Plus (16 A / 230 V / 50 Hz)

- Integrated measurement of:
- current, effective power, voltage, frequency, phase angle and energy
- Indication on illuminated LCD
- Energy meter which can be reset (value is stored even if there is no power supply)
- Measurement accuracy +/- 1%
- End caps riveted and do not open
- Includes mounting brackets and screws
- Plastic light grey, aluminium profile silver



Art. no. | Version | Dimensions (L x W x H)

BlueNet Metered Plus			
integrated power metering, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact			
329.213	6 socket outlets with earthing contact	approx. 482.6 x 44 x 58	
329.214	8 IEC320 sockets C13	approx. 482.6 x 44 x 58	
329.215	6 IEC320 C19 sockets	approx. 482.6 x 44 x 58	
integrated power metering, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact			
800.1658	24 x IEC320 C13; 4 x IEC320 C19 with IEC lock	approx. 1076 x 44 x 58	

BlueNet Metered Plus (16A / 400V / 50 Hz)

Art. no. | Version | Dimensions (L x W x H)

BlueNet Metered Plus			
integrated power metering, 3.0 m H05VV-F 5G 2.50 mm², black, with CEE plug			
800.1659	24 x IEC320 C13; 3 x IEC320 C19 with IEC lock	approx. 1546 x 44 x 58	



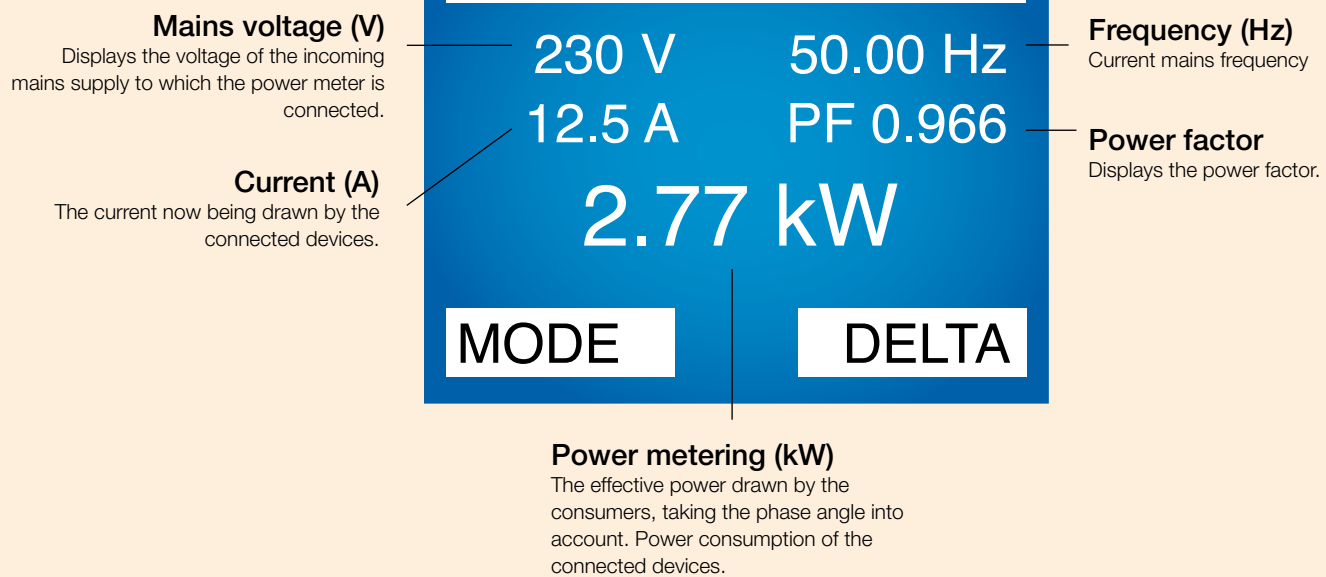
329.213



329.214

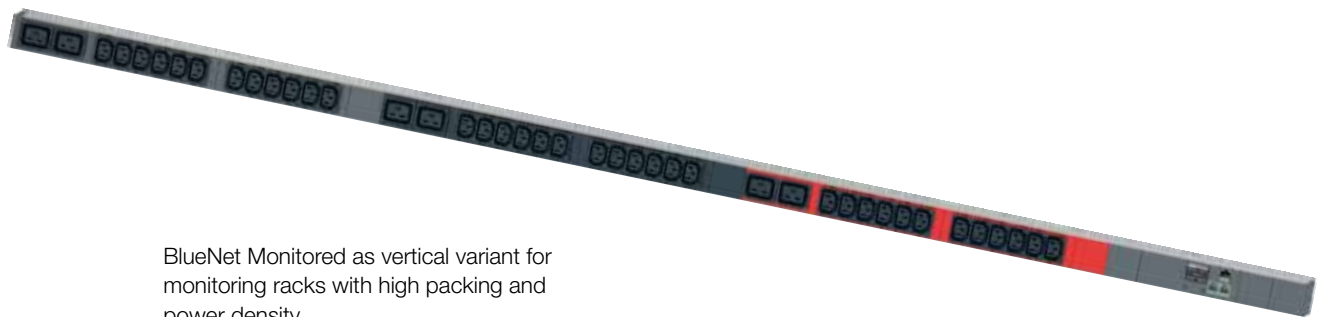


329.215



BlueNet Monitored

16-32A / 230-400 V / 50Hz



BlueNet Monitored as vertical variant for monitoring racks with high packing and power density

The advantages at a glance

- Robust aluminium housing
- 1-phase and 3-phase versions
- 3.6 KW - 22 KW power range
- Extremely compact PDU power metering in 1 U profile (44 mm x 47 mm)
- Coloured phase assignment of socket outlet with earthing contact and IEC320 socket inserts
- Measurement of: current per phase & in total, power per phase & in total (effective, apparent and reactive power)
- Energy consumption, voltage, frequency, power factor, N conductor, current
- Integrated temperature sensor also for self-monitoring
- Two more sensors (temp./humidity) can be connected. If combi sensor is connected, up to an extra
- 2x temp. + 2x humidity measurements possible
- Operated locally or using web browser via Ethernet port
- Protocols: HTTP, SNMP, Ethernet 10/100 MBit/s, DHCP, NTP
- High-resolution 2" TFT display, display can be rotated
- Measurement accuracy +/- 1%
- Internal consumption < 1 W



Combined temperature and air humidity sensor which can be easily secured to the rack using the integrated magnet.



BlueNet Monitored as 19" variant for monitoring the network and distributor racks

BlueNet Monitored				
Home Analyzer Settings Users Maintenance Password About	Channels			
		Active Energy (kWh)	Active Power (W)	Current (A)
	CH1 L1	28.663	0	0.00
	CH2 L2	197.921	15	0.15
	CH3 L3	11.338	1	0.00
	CH4 N			0.16
	Groups			
	Pre-defined	Active Energy (kWh)	Active Power (W)	Current (A)
	Total CH1-3	237.921	16	0.16
	Environment			
		Temperature (°C)		
	Internal Sensor	20.9		
	External Sensor 1	23.1		

- Overview of the system
- Display of effective energy meter, load and current
- Display of internal and external environmental sensors

BlueNet Monitored

Home

Analyzer

Settings

Users

Maintenance

Password

About

Analyzer

	P (W)	Q (var)	S (VA)	U (V)	I (A)	PF	f (Hz)
CH1 L1	0	0	0	231.1	0.00	0.000	50.00
CH2 L2	15	-15	36	231.2	0.15	0.438	50.00
CH3 L3	1	0	1	231.1	0.00	0.000	50.00
CH4 N					0.16		

Groups

	P (W)	Q (var)	S (VA)	I (A)
Pre-defined				
Total CH1-3	16	-15	36	0.16

- Detailed view of the three phases and neutral conductor
- Display of effective, apparent and reactive power, voltage, current, power factor and frequency

BlueNet Monitored PDU

Article number	Cable type	Cable cross-section mm ²	Cable length (m)	Plug	Phase(s)	Rated voltage (V)	Current (A)	Max power in kVA	C13	C19 IEC LOCK	SOEC*	C19	C16A miniature circuit-breaker	Outlets in total	from stock	Length (mm)
329.3009	H05VV-F	1.5	2	ECP*	1	230	16	3.7			6			6	x	438.5
329.3010	H05VV-F	1.5	2	ECP*	1	230	16	3.7	8					8	x	438.5
329.3012	H05VV-F	1.5	3	CEE	3	400	16	11.0	36		6			42	x	1757.7
329.3013	H05VV-F	1.5	3	CEE	3	400	16	11.0	36			6		42	x	1757.7
NEW 329.3056	H05VV-F	4	3	CEE	1	230	32	7.4	24	4			2	28	x	1330.7
NEW 329.3057	H05VV-F	2.5	3	CEE	1	230	16	3.7	24	3				27	x	1032.6
NEW 329.3058	H05VV-F	4	3	CEE	3	400	32	22.1	24	6			3	30	x	1883
NEW 329.3059	H05VV-F	2.5	3	CEE	3	400	16	11.0	24	6				30	x	1373



BlueNet Monitored accessories



Art. no. | Description

BlueNet Monitored accessories

329.3102	Temperature sensor for cable, 2.0m cable
329.3104	Combined temperature and humidity sensor for 2.0m cable
329.3105	USB cable for connecting PDU directly to PC

Accessories

Mounting brackets for VM profile variant / Zero U-Space installation

- Power strip is fixed by insertion into the profile groove provided.
- No additional screws required.

Art. no. | Version

1 U mounting brackets

Zero-U Space

940.143 | · Mounting brackets left and right

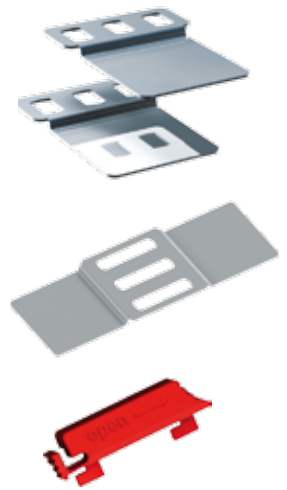
1 U link

Zero-U Space

800.0053 | · For connecting two vertically fitted PDUs

Locking clips

940.103 | · Red locking clip for IEC320 appliance socket outlets C13, supplied in packs of 12.



Cables in various colours to distinguish between power supplies



Art. no.	Cable colour	Article no.	Cable colour	Cable cross-section mm ²	Cable length (m)	Plug	Coupling
356.119	black	356.900	grey	1.0	0.50	C14	C13
356.169	black	356.901	grey	1.0	0.75	C14	C13
356.120	black	356.902	grey	1.0	1.00	C14	C13
356.170	black	356.903	grey	1.0	1.50	C14	C13
356.171	black	356.904	grey	1.0	2.00	C14	C13
356.172	black	356.905	grey	1.5	0.50	ECP*	C13
356.1721	black	356.906	grey	1.5	0.75	ECP*	C13
356.1722	black	356.907	grey	1.5	1.00	ECP*	C13
356.1723	black	356.908	grey	1.5	1.50	ECP*	C13
356.1724	black	356.909	grey	1.5	2.00	ECP*	C13
356.1731	black	356.910	grey	1.5	0.50	C20	C19
356.1732	black	356.911	grey	1.5	0.75	C20	C19
356.1733	black	356.918	grey	1.5	1.00	C20	C19
356.1734	black	356.935	grey	1.5	1.50	C20	C19
356.1735	black	356.936	grey	1.5	2.00	C20	C19
356.1971	black	356.937	grey	1.5	0.50	ECP*	C19
356.1972	black	356.938	grey	1.5	0.75	ECP*	C19
356.1973	black	356.939	grey	1.5	1.00	ECP*	C19
356.1974	black	356.940	grey	1.5	1.50	ECP*	C19
356.1975	black	356.941	grey	1.5	2.00	ECP*	C19



Measurement

Current, power (effective, apparent and reactive power), energy consumption, voltage, frequency, power factor, N conductor

**Integrated display**

The most important measured values at rack level at a glance.

Overview

Shows the measured values of all phases in an overview.

Display can be rotated

The display can be rotated in 90° steps so it is easier to read.

Scrolling

The keys on the front can be used to scroll through the various measured values.

BlueNet BN3000 (Master / Slave)

16-32A / 230-400 V / 50Hz



BlueNet BN3000 is the next generation of BlueNet products. An optimised shape factor, PDUs that can be cascaded via Modbus and a rotatable OLED display create the ideal basis for the energy monitoring system of the future.

The data centre's mains supply is monitored and remotely controlled from the comfort of your desk with BlueNet Network products. BlueNet increases data centre availability, minimises down times and cuts costs.

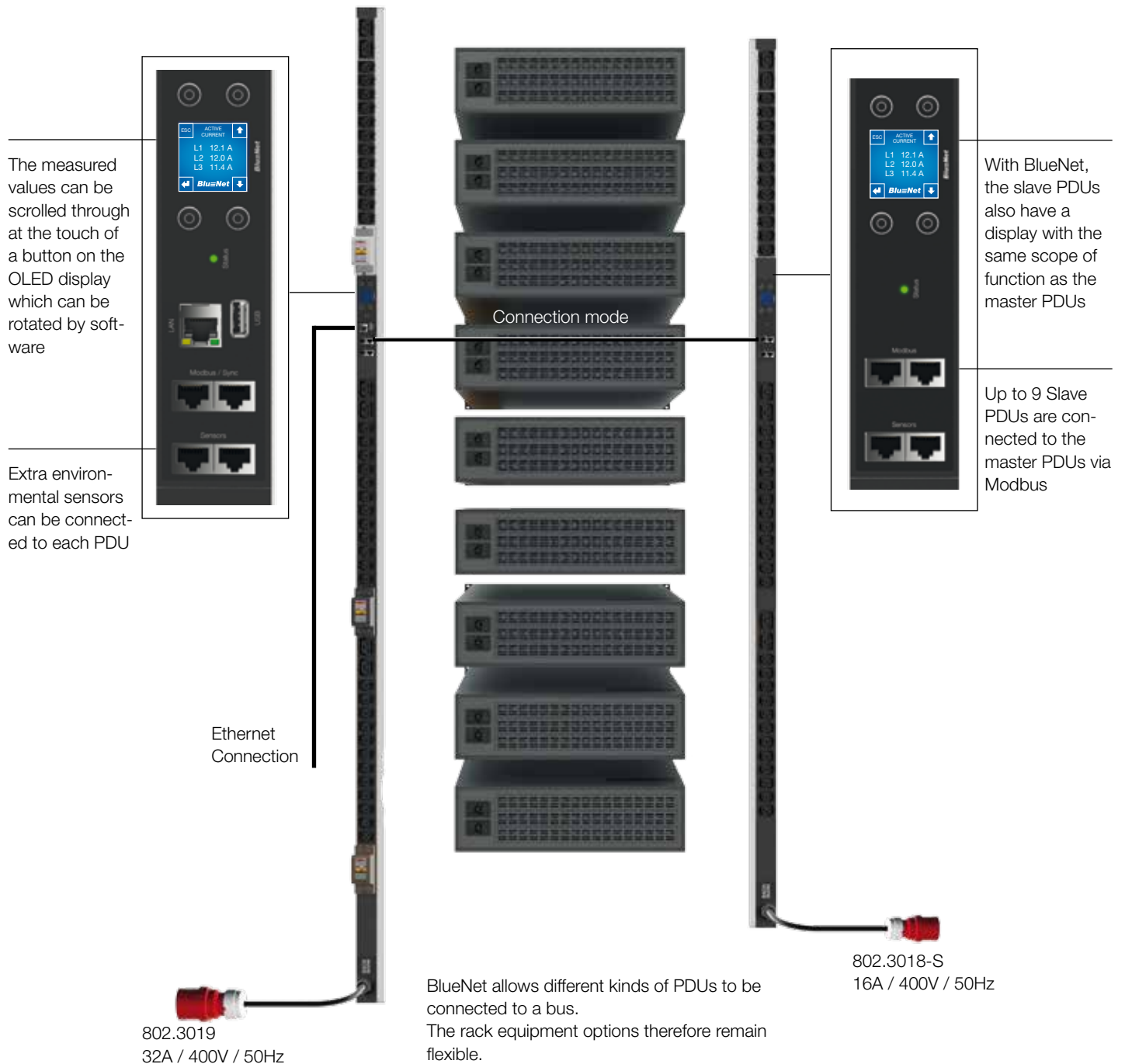
BlueNet monitors current, voltage and power. This allows resources to be planned efficiently and alarms to be issued in the event of faults.

The advantages at a glance

- PDUs can be cascaded via Modbus, just one Ethernet connection is needed for 10 PDUs
- Extremely compact design (1U wide x 60mm deep)
- OLED display can be rotated
- Robust housing made from torsionally rigid aluminium profile
- 1-phase and 3-phase versions
- 3.6 kW - 22 kW power range
- Coloured phase assignment of socket inserts
- Measurement of: Current, power (effective, apparent and reactive power), energy consumption, voltage, frequency, power factor, N conductor
- Measurement per phase
- Option for connecting external sensors (temperature / air humidity)
- Operated locally or using web browser via Ethernet port
- Protocols: HTTP, v SNMP, Ethernet 10/100 MBit/s, DHCP, NTP
- Measurement accuracy +/- 1%
- Internal consumption < 4 W

BlueNet BN3000 (Master / Slave)

16-32A / 230-400 V / 50Hz



BlueNet BN3000 (Master / Slave)

16-32A / 230-400 V / 50Hz



Article number	Article number for slave variant	Cable type	Cable cross-section mm²	Cable length (m)	Plug	Phase(s)	Rated voltage (V)	Current (A)	Max power in kVA	C13	C19	SOEC**	Outlets in total	from stock
802.3004	802.3004-S	H05VV-F	2.5	3	CEE	1	230	16	3.7	16	4	0	20	OR
802.3005	802.3005-S	H05VV-F	4	3	CEE	1	230	32	7.4	16	4	0	20	OR
802.3006		H05VV-F	2.5	3	CEE	1	230	16	3.7	16	0	4	20	OR
802.3007		H05VV-F	4	3	CEE	1	230	32	7.4	16	0	4	20	OR
802.3008		H05VV-F	2.5	3	CEE	3	400	16	11.0	0	6	0	6	OR
802.3009		H05VV-F	4	3	CEE	3	400	32	22.1	0	6	0	6	OR
802.3010		H05VV-F	2.5	3	CEE	3	400	16	11.0	18	3	0	21	OR
802.3011		H05VV-F	2.5	3	CEE	3	400	16	11.0	18	0	3	21	OR
802.3012	802.3012-S	H05VV-F	2.5	3	CEE	3	400	16	11.0	24	6	0	30	OR
802.3013	802.3013-S	H05VV-F	4	3	CEE	3	400	32	22.1	24	6	0	30	OR
802.3014		H05VV-F	2.5	3	CEE	3	400	16	11.0	24	0	6	30	OR
802.3015		H05VV-F	4	3	CEE	3	400	32	22.1	24	0	6	30	OR
802.3016		H05VV-F	2.5	3	CEE	3	400	16	11.0	24	6	6	36	OR
802.3017		H05VV-F	4	3	CEE	3	400	32	22.1	24	6	6	36	OR
802.3018	802.3018-S	H05VV-F	2.5	3	CEE	3	400	16	11.0	36	6	0	42	OR
802.3019	802.3019-S	H05VV-F	4	3	CEE	3	400	32	22.1	36	6	0	42	OR
802.3020		H05VV-F	2.5	3	CEE	3	400	16	11.0	36	0	6	42	OR
802.3021		H05VV-F	4	3	CEE	3	400	32	22.1	36	0	6	42	OR

802.3005



802.3010



802.3012



802.3013



802.3018



802.3019



Accessories

Mounting brackets for VM profile variant / Zero U-Space installation

- Power strip is fixed by insertion into the profile groove provided.
- No additional screws required.

Art. no. | Version

1 U mounting brackets

Zero-U Space

940.143 | · Mounting brackets left and right

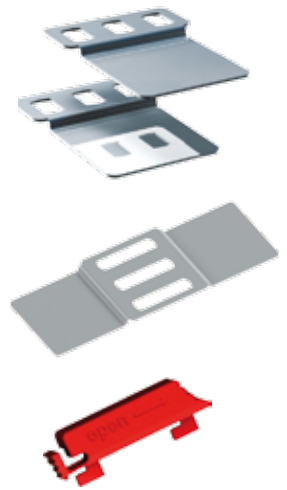
1 U link

Zero-U Space

800.0053 | · For connecting two vertically fitted PDUs

Locking clips

940.103 | · Red locking clip for IEC320 appliance socket outlets C13, supplied in packs of 12.



Cables in various colours to distinguish between power supplies



Art. no.	Cable colour	Article no.	Cable colour	Cable cross-section mm ²	Cable length (m)	Plug	Coupling
356.119	black	356.900	grey	1.0	0.50	C14	C13
356.169	black	356.901	grey	1.0	0.75	C14	C13
356.120	black	356.902	grey	1.0	1.00	C14	C13
356.170	black	356.903	grey	1.0	1.50	C14	C13
356.171	black	356.904	grey	1.0	2.00	C14	C13
356.172	black	356.905	grey	1.5	0.50	ECP*	C13
356.1721	black	356.906	grey	1.5	0.75	ECP*	C13
356.1722	black	356.907	grey	1.5	1.00	ECP*	C13
356.1723	black	356.908	grey	1.5	1.50	ECP*	C13
356.1724	black	356.909	grey	1.5	2.00	ECP*	C13
356.1731	black	356.910	grey	1.5	0.50	C20	C19
356.1732	black	356.911	grey	1.5	0.75	C20	C19
356.1733	black	356.918	grey	1.5	1.00	C20	C19
356.1734	black	356.935	grey	1.5	1.50	C20	C19
356.1735	black	356.936	grey	1.5	2.00	C20	C19
356.1971	black	356.937	grey	1.5	0.50	ECP*	C19
356.1972	black	356.938	grey	1.5	0.75	ECP*	C19
356.1973	black	356.939	grey	1.5	1.00	ECP*	C19
356.1974	black	356.940	grey	1.5	1.50	ECP*	C19
356.1975	black	356.941	grey	1.5	2.00	ECP*	C19



Maximum availability and safety

with BlueNet RESIDUAL CURRENT MONITORING (RCM)

Using residual current monitoring allows changes in the level of insulation to be detected at an early stage before protective devices are tripped by a high residual current, that puts people at risk and involves the risk of fire.

This gain in time allows countermeasures to be planned and contributes to the high availability of the power supply and therefore the system. Thanks to the Bachmann BlueNet PDU, this residual current monitoring isn't just undertaken at central measuring points, but on the socket outlets of every consumer. This standard-compliant residual current technology, the result of a joint development with Bender, provides a high physical granularity, maximum safety and high availability. This AC / DC sensitive technology monitors all kinds of residual current in modern power supplies with switching power. The new BlueNet residual current PDU is therefore particularly suited to use in IT.

Permanent monitoring is absolutely essential in modern information technology. Continuous monitoring equipment reduces the work involved in statutory repeat tests. In accordance with accident prevention guidelines (BGV A3), the testing dates for measuring insulation can be adapted to suit actual circumstances and optimise costs using permanent RCM. DIN VDE 0100-410 (Protective measures – protection from electric shock) is also applied as prescribed by law for final circuits of up to 20 A without use of an RCD, which may result in undesired switching off.

The BlueNet residual current monitor is able to record residual currents of 5 mA and higher. Residual current activation values can be set in the BlueNet software. BlueNet Software reliably signals instances where these values are exceeded. All measured values are transferred to superordinate monitoring systems via the Ethernet interface. A local display in the PDU also provides information about all important measured values.

This setup ensures that the availability of the power supply has absolute priority at all times and that the system is not unexpectedly cut off in the event of errors.

The BlueNet technology also allows a master-slave network to be installed, saving installation costs and minimising the administration work involved.



The advantages at a glance

Greater safety for people, operations and systems:

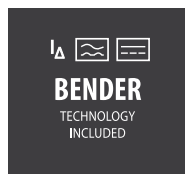
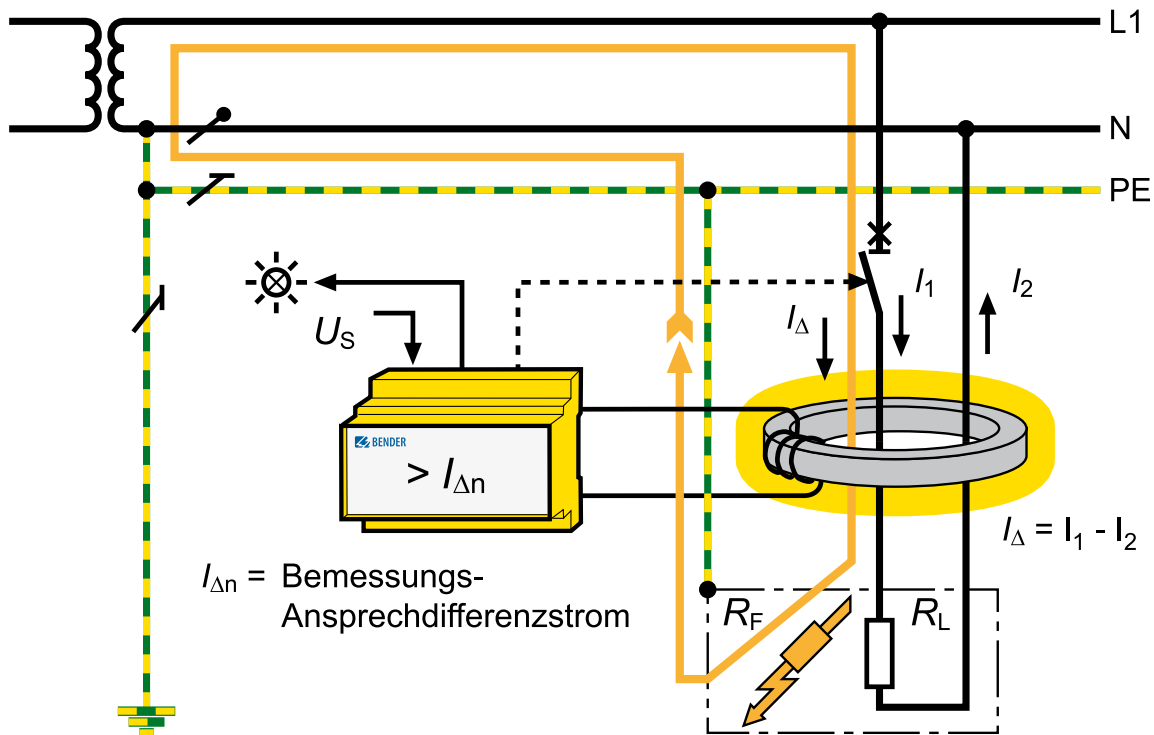
- Early detection of data loss and network failure
- DIN VDE 0100-410 is applied as prescribed by law for final circuits of up to 20 A without use of an RCD
- Recording of residual currents at the consumer socket outlet directly for the fastest possible error localisation
- Preventative safety to protect people from the hazards caused by electric current
- Faults and unexpected interruptions to the operation of sensitive equipment are minimised
- Insulation errors in newly installed systems and devices are detected immediately
- Permanent monitoring of systems and operating equipment
- TN-S systems are monitored for additional unwanted N-PE bridges

More cost-effective

- Continuous monitoring equipment reduces the work involved in repeat tests.
In accordance with §5 of the accident prevention guidelines BGV A3, the testing dates for measuring insulation can be adapted to suit actual circumstances using permanent RCM.
- No expensive and unscheduled system downtimes and service interventions

Greater fire protection

- Combustible residual currents are recognised as they arise.



Article number	Article number Slave variant	Cable type	Cable cross-section mm ²	Cable length (m)	Plug	Phase(s)	Rated voltage (V)	Current (A)	Max power in kVA	C13	C19	SOEC**	Outlets in total	from stock
802.3022		H05VV-F	2.5	3	CEE	3	400	16	11.0	18	3	0	21	OR
802.3023		H05VV-F	2.5	3	CEE	3	400	16	11.0	18	0	3	21	OR
802.3024	802.3024-S	H05VV-F	2.5	3	CEE	3	400	16	11.0	24	6	0	30	OR
802.3025	802.3025-S	H05VV-F	4	3	CEE	3	400	32	22.1	24	6	0	30	OR
802.3026	802.3026-S	H05VV-F	2.5	3	CEE	3	400	16	11.0	36	6	0	42	OR



802.3022



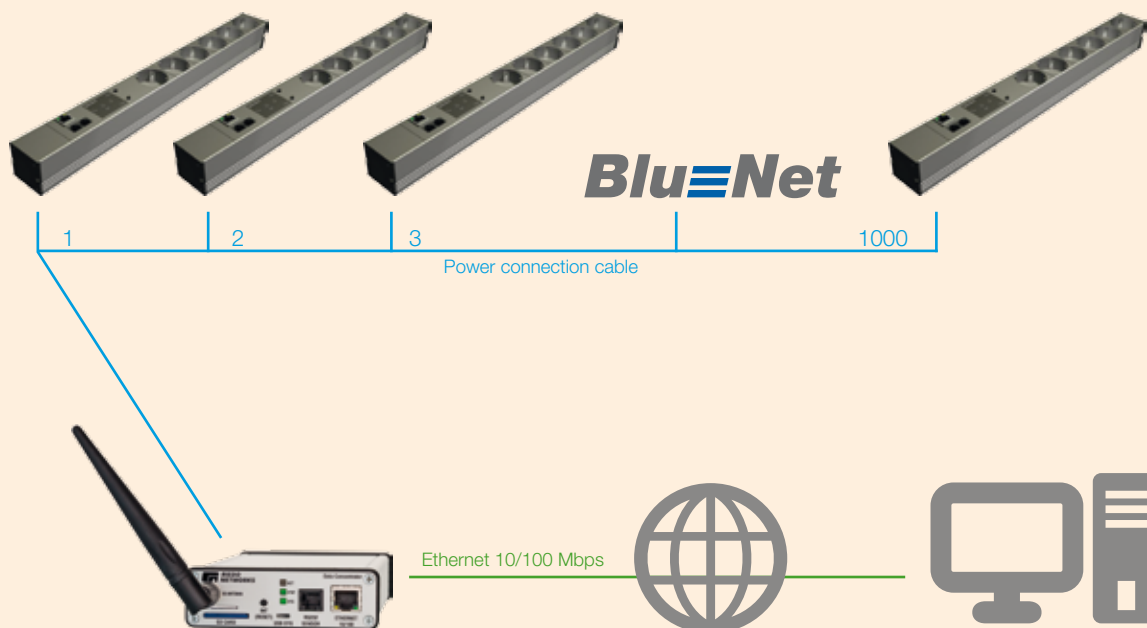
802.3024



802.3025



802.3026



BlueNet Monitored PLC

(Power Line Communication)

16-32A / 230-400 V / 50Hz

The advantages at a glance

- Robust aluminium housing
- 1-phase and 3-phase versions
- 3.6 KW - 22 KW power range
- Extremely compact PDU power metering in 1 U profile (44 mm x 47 mm)
- Coloured phase assignment of socket outlet with earthing contact and IEC320 socket inserts
- Measurement of: Current per phase & in total, power per phase & in total (effective, apparent and reactive power)
- Energy consumption, voltage, frequency, power factor, N conductor, current
- Integrated temperature sensor also for self-monitoring
- Two more sensors (temp./humidity) can be connected. If combi sensor is connected, up to an extra
- 2x temp. + 2x humidity measurements possible
- Operated locally or using web browser via Ethernet port
- Protocols : HTTP; SNMP, Ethernet 10/100 MBit/s, DHCP, NTP
- High-resolution 2" TFT display, display can be rotated
- Measurement accuracy +/- 1%
- Internal consumption < 1 W
- Transmission of all data via Ethernet and powerline (SNMP protocol)

Benefits of Power Line technology

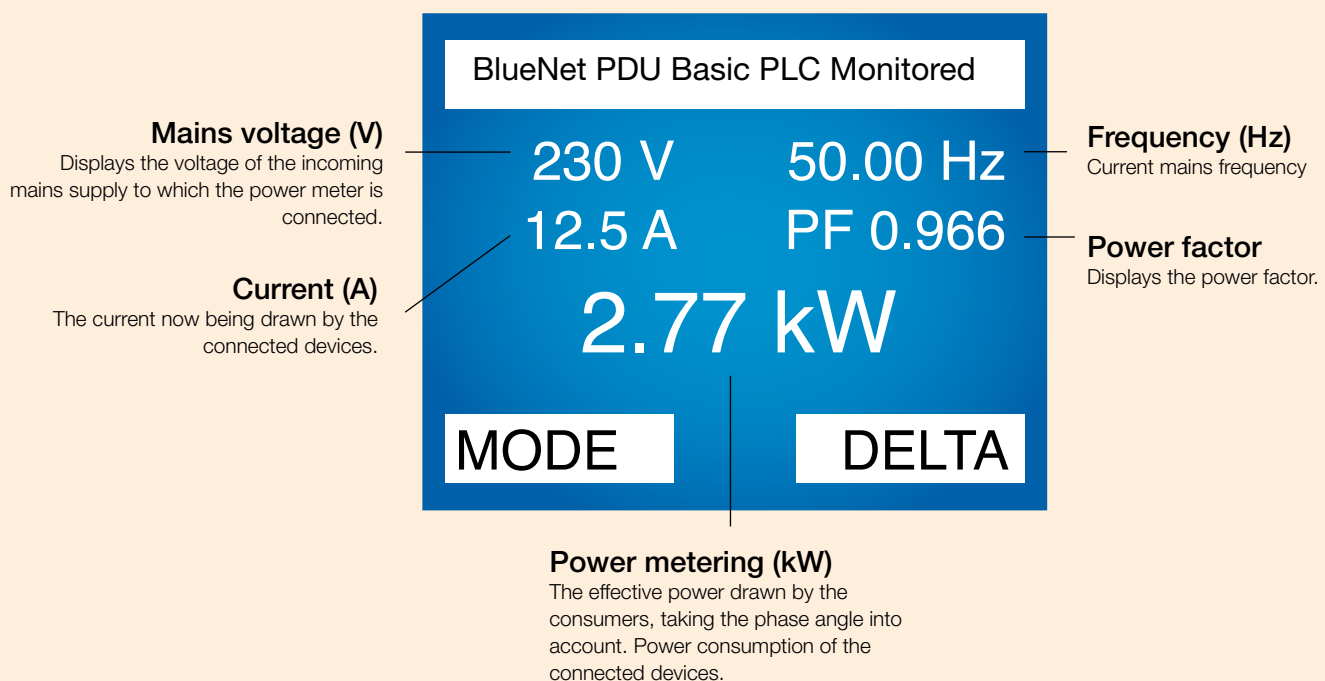
- The PLC module can be combined with all BlueNet Monitored products
- Narrowband Powerline Communication (PLC) with high availability and not susceptible to disturbances
- Data from any number of PDUs is managed centrally using a concentrator
- Optimisation of investment and operating costs through reduction in network cabling, patch cabling, IP addresses and switch ports
- No additional space needed in the PDU for the PLC module
- No cable-lined radiation / disturbances in the network
- 95-125 kHz according to Cenelec B
- Internal consumption 0.2 W

BlueNet Monitored modules with PLC

- Keep an eye on costs with monitored power consumption and power factor
- Each device has a unique serial number, which appears in the SNMP tree via a central unit
- Connection and disconnection without interrupting data communication.
- Each unit has a unique serial number.
- 7 units are queried per second.
Around 300 units a minute can be queried in parallel with one central unit.
- If the units are supplied by different three-phase power systems, one central unit must be used per system.
- Alarms are issued in real time. Individual nodes can be selected and therefore queried every second.

PLC Concentrator

- Very compact Power Line Concentrator
- (35mm DIN rail (type O) can be fitted on top hat rails)
- All data is recorded centrally by the data concentrator (3 phases) and therefore managed centrally too.
- All SNMP-capable management software can read the data from the data concentrator
- No moving parts (no fans, has passive cooling, industrial-strength Flash memory)
- Serial connection for maintenance and updates
- 10/100 Mbps Ethernet interface
- Status LEDs



BlueNet Monitored PLC

16-32A / 230-400 V / 50Hz



Article number	Cable type	Cable cross-section mm²	Cable length (m)	Plug	Phase(s)	Rated voltage (V)	Current (A)	Max power in kVA	C13	C19 IEC LOCK	C16A miniature circuit-breaker	Outlets in total	on request	Length (mm)
329.3111	H05VV-F	2.5	3	CEE	3	400	16	11.0	36			36	x	1458
329.3112	H05VV-F	4	3	CEE	1	230	32	7.4	24	4	2	28	x	1330.7
329.3113	H05VV-F	2.5	3	CEE	1	230	16	3.7	24	3		27	x	1032.6
329.3114	H05VV-F	4	3	CEE	3	400	32	22.1	24	6	6	30	x	1883
329.3115	H05VV-F	2.5	3	CEE	3	400	16	11.0	24	6		30	x	13.773



BlueNet Power Line Concentrator

The BlueNet Power Line Concentrator collects the data from the Power Line PDUs and supplies it to the network via the Ethernet interface

Art. no. | Version

BlueNet Concentrator with Power Line communications module

Assembly on 35mm DIN rail (type 0) / top hat rail

329.3016	1 phase / 230 V
329.3017	3 phases / 400 V

BlueNet Monitored accessories

Art. no. | Description

BlueNet Monitored accessories

329.3102	Temperature sensor 2.0m cable
329.3104	Combined temperature and humidity sensor 2.0m cable
329.3105	USB cable for connecting PDU directly to PC

Accessories

Mounting brackets for VM profile variant / Zero U-Space installation

- Power strip is fixed by insertion into the profile groove provided.
- No additional screws required.

Art. no. | Version

1 U mounting brackets

Zero-U Space

940.143 | · Mounting brackets left and right

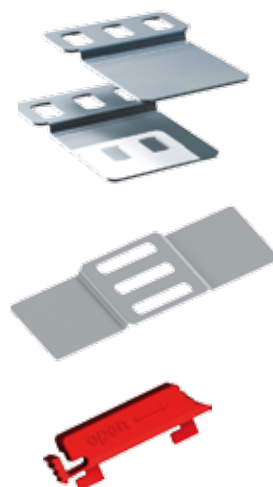
1 U link

Zero-U Space

800.0053 | · For connecting two vertically fitted PDUs

Locking clips

940.103 | · Red locking clip for IEC320 appliance socket outlets C13, supplied in packs of 12.



Cables in various colours to distinguish between power supplies



Art. no.	Cable colour	Article no.	Cable colour	Cable cross-section mm ²	Cable length (m)	Plug	Coupling
356.119	black	356.900	grey	1.0	0.50	C14	C13
356.169	black	356.901	grey	1.0	0.75	C14	C13
356.120	black	356.902	grey	1.0	1.00	C14	C13
356.170	black	356.903	grey	1.0	1.50	C14	C13
356.171	black	356.904	grey	1.0	2.00	C14	C13
356.172	black	356.905	grey	1.5	0.50	ECP*	C13
356.1721	black	356.906	grey	1.5	0.75	ECP*	C13
356.1722	black	356.907	grey	1.5	1.00	ECP*	C13
356.1723	black	356.908	grey	1.5	1.50	ECP*	C13
356.1724	black	356.909	grey	1.5	2.00	ECP*	C13
356.1731	black	356.910	grey	1.5	0.50	C20	C19
356.1732	black	356.911	grey	1.5	0.75	C20	C19
356.1733	black	356.918	grey	1.5	1.00	C20	C19
356.1734	black	356.935	grey	1.5	1.50	C20	C19
356.1735	black	356.936	grey	1.5	2.00	C20	C19
356.1971	black	356.937	grey	1.5	0.50	ECP*	C19
356.1972	black	356.938	grey	1.5	0.75	ECP*	C19
356.1973	black	356.939	grey	1.5	1.00	ECP*	C19
356.1974	black	356.940	grey	1.5	1.50	ECP*	C19
356.1975	black	356.941	grey	1.5	2.00	ECP*	C19



BlueNet Switched

Power distribution units

- Socket outlets can be switched individually
- Safe zero-voltage switching
- Integrated LED switching status check per port
- Integrated Ethernet connection
- Operated via web browser
- Includes the following protocols: HTTP, HTTPS, SNMP, SMTP, NTP, SSH
- Robust aluminium housing



BlueNet Switched PDU 1-phase (16 A / 230 V / 50 Hz)

Art. no.	Version	Dimensions (L x W x D)
BlueNet Switched 1-phase		
19", 2.0 m H05VV-F 3G 1.50 mm ² , black, with right angle plug with earthing contact		
V 329.700	8 IEC320 sockets C13	482.6 x 44 x 199 mm
329.702	6 socket outlets with earthing contact	482.6 x 44 x 199 mm
Zero-U Space, 2.0 m H05VV-F 3G 1.50 mm ² , black, with right angle plug with earthing contact		
V 329.701	16 IEC320 sockets C13	692 x 44 x 199 mm

BlueNet Switched PDU 3-phase (3 x 32 A / 400 V / 50 Hz)

In the 32 A versions of the Switched PDUs, each 32 A per phase is split over two groups of pots with two MCBs.

Art. no.	Version	Dimensions (L x W x D)
BlueNet Switched 3-phase		
3.0 m Ölflex 3G 4 mm ² , black, with CEE plug 32A red		
V 329.703	24 IEC320 C13 sockets, 6 IEC320 C19 sockets	1713 x 44 x 207 mm
329.704	12 IEC320 C19 sockets	1202 x 44 x 207 mm
329.705	24 socket outlets with earthing contact	1713 x 44 x 207 mm

329.704

BlueNet Managed

Power distribution units

- Socket outlets can be switched individually
- Safe zero-voltage switching
- Integrated LED switching status check per port
- Integrated Ethernet connection
- Operated via web browser
- Integrated measurement of current, effective power, voltage, frequency and phase angle
- Includes the following protocols: HTTP, HTTPS, SNMP, SMTP, NTP, SSH
- Robust aluminium housing
- Illuminated LCD

BlueNet Managed PDU

In the 32 A versions of the Managed PDUs, each 32 A per phase is split over two groups of pots with two MCBs.

Art. no.	Version	Dimensions (L x W x D)
BlueNet Managed 1-phase		
3.0 m H05VV-F 3G1.5 mm ²		
329.806	4 socket outlets with earthing contact	482.6 x 44 x 207 mm



BlueNet Managed PDU 3-phase (3 x 32 A / 400 V / 50 Hz)

In the 32 A versions of the Managed PDUs, each 32 A per phase is split over two groups of pots with two MCBs.

Art. no.	Version	Dimensions (L x W x D)
BlueNet Managed 3-phase		
3.0 m H05VV-F 5G 4 mm ² , black, with CEE plug 32A red		
329.800	24 IEC320 C13 sockets, 6 IEC320 C19 sockets	1713 x 44 x 207 mm
329.801	12 IEC320 C19 sockets	1202 x 44 x 207 mm
329.802	24 socket outlets with earthing contact	1713 x 44 x 207 mm



329.802



MODULARITY

On request, all BlueNet WiFi/LAN products are also available with RCDs, RC circuit breakers, miniature circuit breakers, complete device protection or, for example, thermal fuse.

METERING + SWITCHING

3 switching groups of 16 A each, can be switched manually or automatically depending on load, temperature and time. Optional permanent socket outlets.

WIFI ANTENNA

The WiFi/LAN module is available with an internal or external antenna.

COMMUNICATION

Ethernet interface as well as WiFi connectivity (802.11 b/g/n) and DDNS support.

ALARM FUNCTION

Reports e-mailed when values exceed or fall below electrical work, power or temperature. Measurement data available as .csv file.

WIFI/LAN MODULE

Power metering, temperature measurement, switchable socket outlets, web interface, mobile app for Android and iOS.

WiFi/LAN module

The complete solution for small and mid-sized IT applications



The new BlueNet WiFi/LAN module provides three separate switching and measuring groups for extended power metering and temperature measuring, and the switching of individual socket outlets and complete power strips.

The management interface is integrated in the web server and is operated via the web browser in the network or with Dynamic DNS via the Internet. The BlueNet WiFi app is available for mobile end devices.

The maximum switching capacity is a full 16 A per switching group. Switching can be performed both manually and automatically using load, temperature or time thresholds which can be set individually.

The WiFi/LAN module can be integrated in virtually all Bachmann products. External temperature sensors are available as accessories in lengths of 3, 10 and 20m.

An external RP-SMA antenna connection is provided for all Bachmann's IT WiFi/LAN products.

External WiFi antennas are also available as accessories.

Thanks to its compact design, the WiFi/LAN module can be integrated in the modular Bachmann system and combined with connector systems, basic products and other components.

Manual switching

The WiFi/LAN module is accessed by Internet browser or mobile app. A static or dynamic IP address of the local network is assigned to the WiFi/LAN module. A dynamic DNS is fully supported and allows access (including remote access) to connected WiFi/LAN products with all functions, such as switching the switching outputs and monitoring of temperature and power data at any time. Depending on product variant, can also be switched using local buttons.

The advantages at a glance

- Three switching groups of 16 A each
- Temperature measurement and power metering
- Load management and cost control
- Management via web interface and smartphone app
- Remote online access via Dynamic DNS
- WiFi (802.11 b/g/n) and Ethernet connectivity

Time-controlled switching

The WiFi/LAN module provides convenient programming of the timer via the web browser. Only the time is entered during daily switching (on/off). The socket outlet's system time can be automatically synchronised via the Internet on a daily basis. The days of the week can be set for weekly switching processes. The switching actions (on/off) are selected individually for each time. All settings are saved in an individual profile. Up to four profiles can be created with the WiFi/LAN module.

Temperature monitoring, threshold value alarms and temperature-dependent switching

The ambient temperature is measured using the connected temperature sensor and displayed directly in the web browser and app. If values exceed or fall below personally defined threshold values, e-mails are sent automatically. Limit values, at which the selected switching groups are switched automatically, allow e.g. an air conditioning device or a heating fan to function in a particular temperature range with the aid of WiFi/LAN technology.

Power metering, issuing of threshold value alarms and load-dependent switching

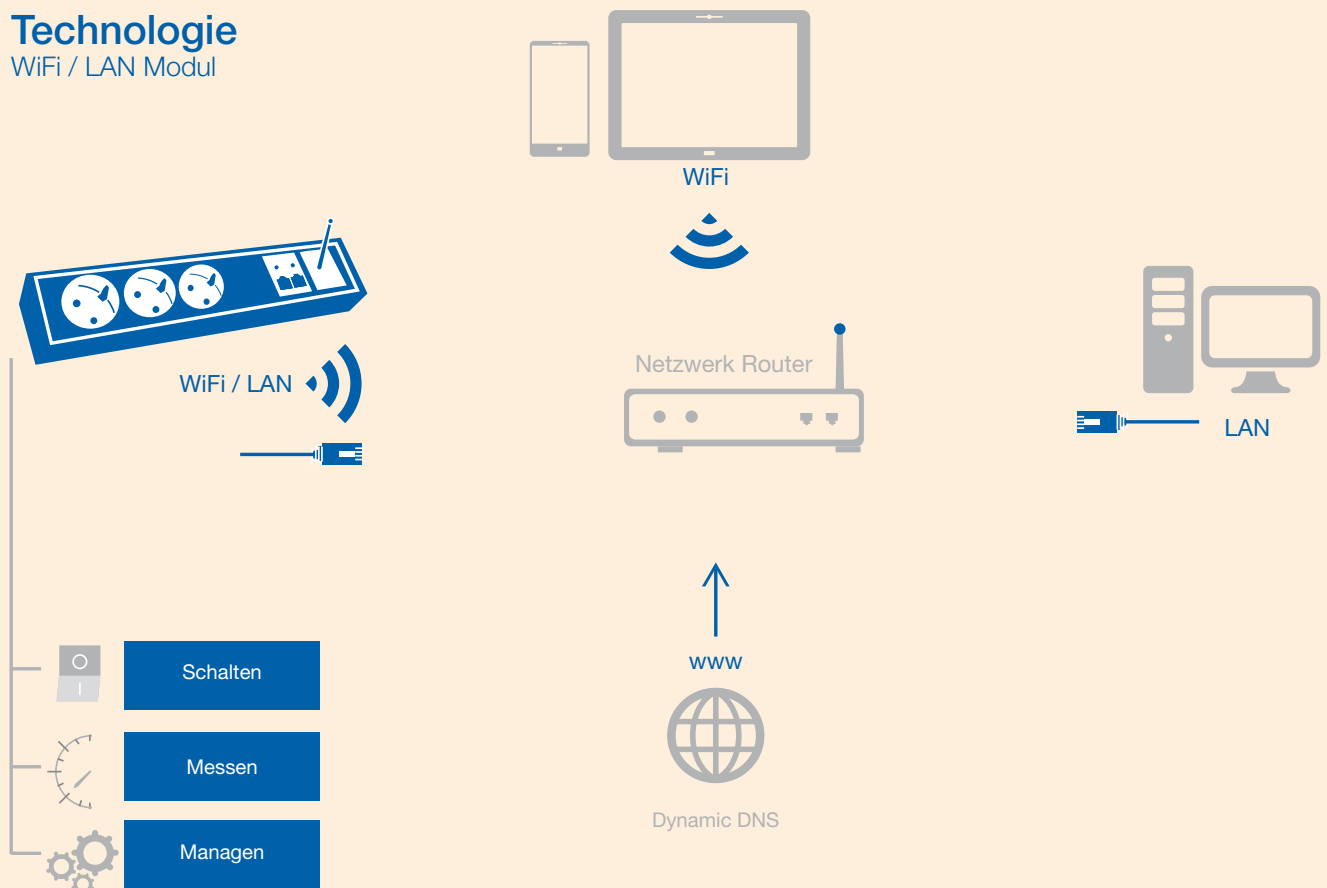
Within the WiFi/LAN module, the present electrical power of the three switching groups is measured and visualised via a web interface or app. Again automatic switching is possible following a freely definable effective power threshold value per switching group. E-mails can also be sent automatically if values exceed or fall below the measured power or electrical work.

Key facts

- Measurement of: Temperature, voltage (V), current (A), $\cos \phi$ effective power (W), apparent power (VA), work (kWh) and costs (€)
- Switching function: manual, by power, temperature or time; three switching groups of 16A each
- Communication: WiFi (802.11 b/g/n, Ethernet 10/100), supports DDNS
- SSL-encrypted e-mail messages when values exceed or fall below threshold values
- Integrated web server with graphic management interface
- Client applications for Android and iOS
- With internal or external antenna as an option
- Measurement accuracy +/- 1%

Technologie

WiFi / LAN Modul

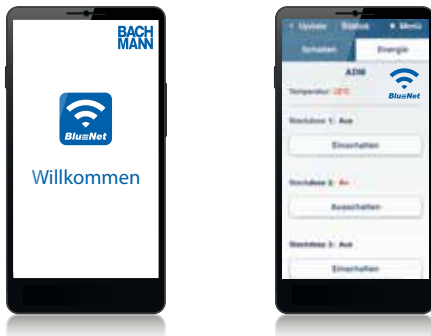


**App for smartphones or tablet PCs

The app is available from the Play Store (for Android) or the App Store (for iOS) by searching for BlueNet WiFi. The present temperature, current switching statuses and current power metering data are displayed. The socket outlets can be switched on and off. If a Dynamic DNS address is entered, this entire functional scope can be accessed remotely via 3G or 4G.



Smartphone interface



Tablet interface



Website interface

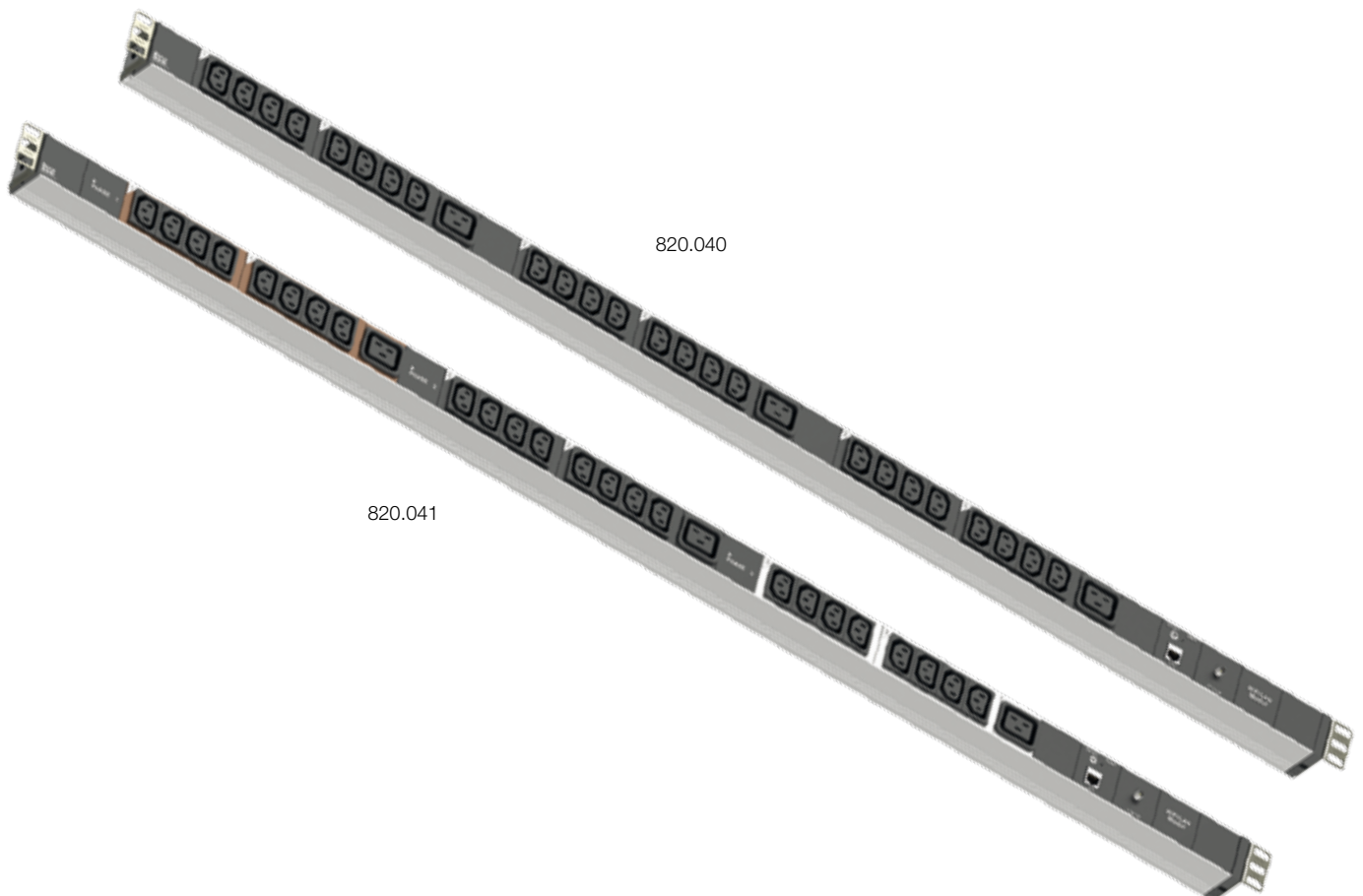


WiFi/LAN power metering (BlueNet Basic WiFi/LAN)

- Power metering
- Temperature monitoring
- Threshold value alarms

For more information, see page 37

Article number	Cable type	Cable cross-section mm ²	Cable length (m)	Plug	Phase(s)	Rated voltage (V)	Current (A)	Max power in kVA	C13	C19 IEC LOCK	SOEC**	UTE	T13	Outlets in total	from stock	Dimensions (LxWxH)
820.034	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7			3			3	yes	437 x 44.4 x 46.2
820.036	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7				3		3	yes	437 x 44.4 x 46.2
820.038	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7					3	3	yes	437 x 44.4 x 46.2
820.035	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7			6			6	yes	607 x 44.4 x 46.2
820.037	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7				6		6	yes	607 x 44.4 x 46.2
820.039	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7					6	6	yes	437 x 44.4 x 92.4
820.040	H05VV-F	3G 1.5	2	CEE 16	1	230	16	3.7	24	3				27	yes	1245 x 44.4 x 46.2
820.041	H05VV-F	3G 1.5	2	CEE 16	3	400	16	11.0	24	3				27	no	1245 x 44.4 x 46.2



WiFi/LAN power metering & switching (BlueNet Basic WiFi/LAN Managed)

- Power metering
- Temperature monitoring
- Issuing of threshold value alarms
- Remote switching
- Time-controlled switching
- Temperature-dependent switching

For more information, see page 37

Article number	Cable type	Cable cross-section mm ²	Cable length (m)	Plug	Phase(s)	Rated voltage (V)	Current (A)	Max power in kVA	SOEC**	UTE	T13	Outlets in total	from stock	Dimensions (LxWxH)
820.028	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7	3			3	yes	437 x 44.4 x 46.2
820.030	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7		3		3	yes	522 x 44.4 x 46.2
820.032	H05VV-F	3G 1.5	2	T12	1	230	16	3.7			3	3	yes	437 x 44.4 x 46.2
820.029	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7	6			6	yes	522 x 44.4 x 46.2
820.031	H05VV-F	3G 1.5	2	ECP*	1	230	16	3.7		6		6	yes	607 x 44.4 x 46.2
820.033	H05VV-F	3G 1.5	2	T12	1	230	16	3.7			9	9	yes	522 x 44.4 x 46.2



WiFi/LAN accessories

Art. no. | Description

BlueNet Monitored accessories	
820.045	External temperature sensor 3.0 m; jack plug 2.5 mm; measuring range of sensor max. -50°C to 110°C
820.046	External temperature sensor 10 m; jack plug 2.5 mm; measuring range of sensor max. -50°C to 110°C; water-tight IP88
820.047	External temperature sensor 20 m; jack plug 2.5 mm; measuring range of sensor max. -50°C to 110°C; water-tight IP88
820.048	RP-SMA WiFi antenna; with pivoted joint; 802.11 b/g/n; boosting 2dBi
820.049	RP-SMA WiFi antenna; with pivoted joint; 802.11 b/g/n; boosting 5dBi
820.050	RP-SMA WiFi antenna; magnetic and rubberised supporting foot; can be tilted into 3 positions; Antenna cable 1m; 802.11 b/g/n; boosting 6dBi
820.051	SMA-RP extension 2.0m; end 1: SMA-RP plug; end 2: SMA-RP socket; black
820.052	SMA-RP extension 5.0m; end 1: SMA-RP plug; end 2: SMA-RP socket; black



Cables in various colours to distinguish between power supplies

Art. no.	Cable colour	Article no.	Cable colour	Cable cross-section mm ²	Cable length (m)	Plug	Coupling
356.119	black	356.900	grey	1.0	0.50	C14	C13
356.169	black	356.901	grey	1.0	0.75	C14	C13
356.120	black	356.902	grey	1.0	1.00	C14	C13
356.170	black	356.903	grey	1.0	1.50	C14	C13
356.171	black	356.904	grey	1.0	2.00	C14	C13
356.172	black	356.905	grey	1.5	0.50	ECP*	C13
356.1721	black	356.906	grey	1.5	0.75	ECP*	C13
356.1722	black	356.907	grey	1.5	1.00	ECP*	C13
356.1723	black	356.908	grey	1.5	1.50	ECP*	C13
356.1724	black	356.909	grey	1.5	2.00	ECP*	C13
356.1731	black	356.910	grey	1.5	0.50	C20	C19
356.1732	black	356.911	grey	1.5	0.75	C20	C19
356.1733	black	356.918	grey	1.5	1.00	C20	C19
356.1734	black	356.935	grey	1.5	1.50	C20	C19
356.1735	black	356.936	grey	1.5	2.00	C20	C19
356.1971	black	356.937	grey	1.5	0.50	ECP*	C19
356.1972	black	356.938	grey	1.5	0.75	ECP*	C19
356.1973	black	356.939	grey	1.5	1.00	ECP*	C19
356.1974	black	356.940	grey	1.5	1.50	ECP*	C19
356.1975	black	356.941	grey	1.5	2.00	ECP*	C19



WiFi/LAN examples of use



Safety and availability

The low-cost complete solution for server rooms or smaller IT infrastructures for metering, switching and managing.



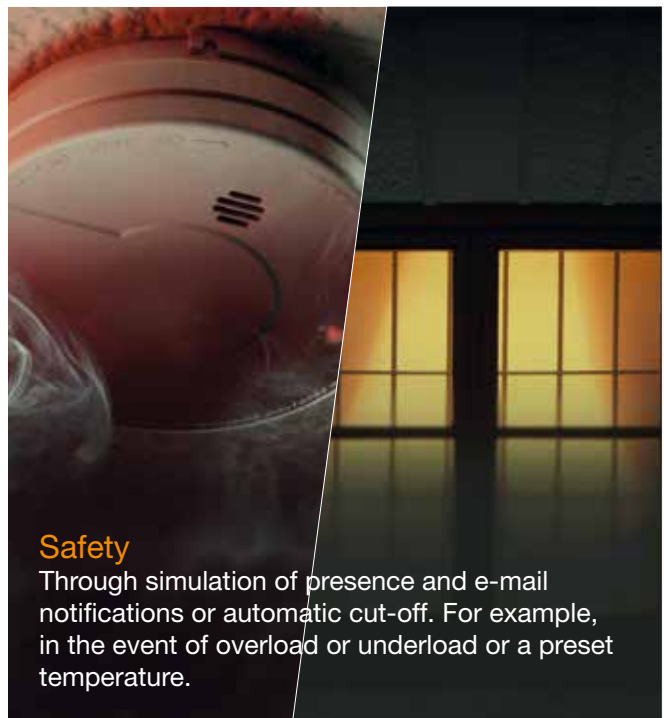
Cost control, resource planning and load management

with the WiFi/LAN module



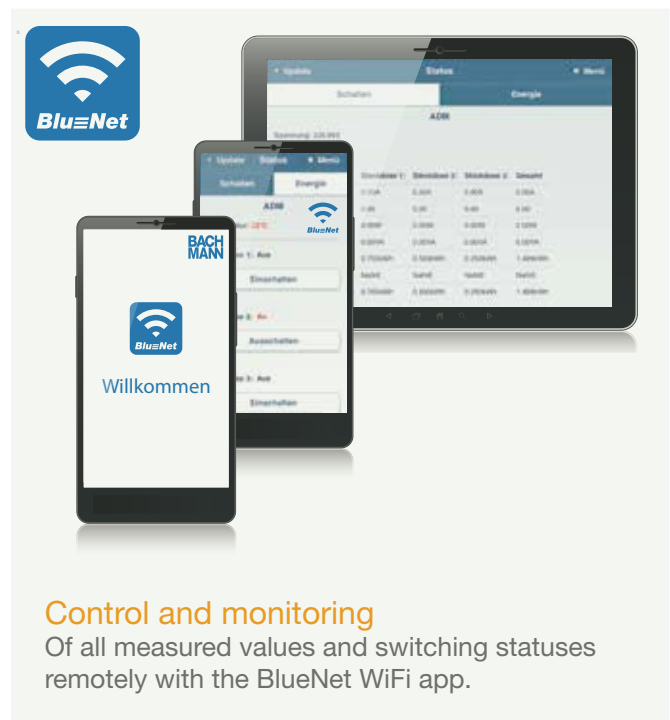
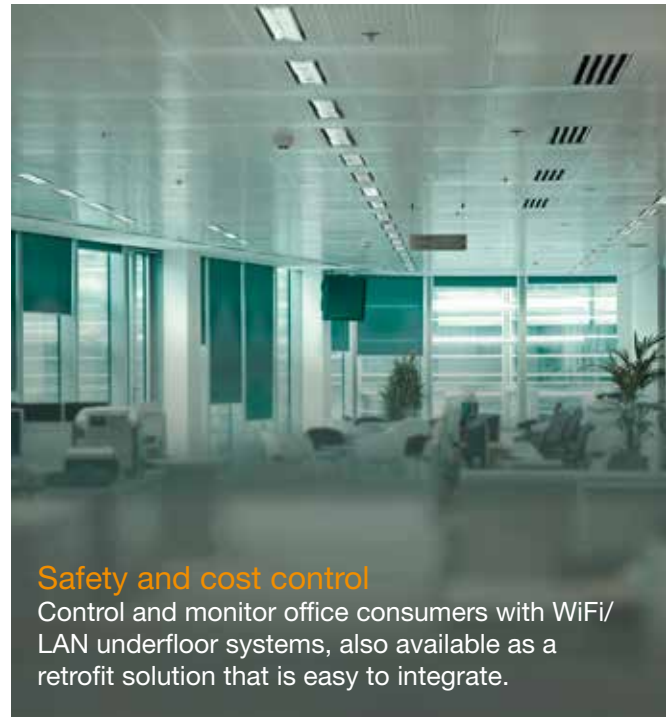
Comfort and energy-aware lifestyle

Thanks to automatic control of electrical consumers such as lights, circulating pumps and radiators.



Safety

Through simulation of presence and e-mail notifications or automatic cut-off. For example, in the event of overload or underload or a preset temperature.





BlueNet Power Unit 2 U

(Modular) 16-32A / 230-400 V / 50 Hz

BlueNet POWER UNIT offers a modular platform for power distribution in data centres. The POWER UNIT basic unit provides power distribution in the rack. If necessary, the measurement module can be retrofitted or replaced during use without interrupting the supply.

The advantages at a glance

- 3.6 KW - 44 KW power range, 1 phase (CEE or IEC320) or 3 phases,
- Two galvanically isolated C20 infeeds (16-32A / 230-400V)
- Up to four outputs on the rear (IEC320 or CEE)
- Measurement of: Current per phase & in total, effective power per phase & in total, voltage, frequency, phase angle, energy consumption, N conductor.
- Operated via web browser
- Active issuing of alarms by e-mail or SNMP Trap
- Encrypted data communication
- Protocols: HTTP, HTTPS, SNMP, SMPT, NTP, SSH, Ethernet 100 MBit/s
- Indication on illuminated, rolling LCD
- Robust 19" enclosure in steel plate with just 2 U
- Measurement accuracy +/- 1%

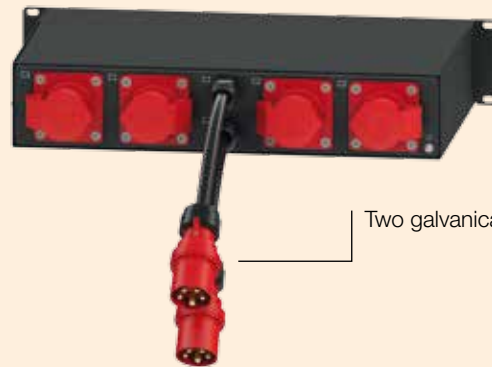
The measurement module can be replaced during use without interrupting the supply to the connected devices.



2 U high, 19" wide
(1 U corresponds to 44.45mm)

Current, effective power, voltage, frequency, phase angle and energy can be read from the LC display on the front of the unit. LEDs indicate whether there is voltage present on each of the phases.

A built-in Ethernet port lets you export readings and set alarm thresholds via a web browser or SNMP.



Two galvanically isolated infeeds.

Power metering (kW)

The effective power drawn by the consumers, taking the phase angle into account. Power consumption of the connected devices.

Mains voltage (V)

Displays the voltage of the incoming mains supply to which the power meter is connected.

Frequency (Hz)

Current mains frequency

Phase angle

Displays the phase shift in the power network.

Current (A)

The current now being drawn by the connected devices.

Phase indicator (P)

Shows the phase (1, 2 or 3) currently being measured. Display moves automatically through the phases showing their respective measured values.



Total energy consumption (kWh)

The total energy consumption shown on the display is calculated taking the phase angle into account.

BlueNet Power Unit

16A / 230V / 50 Hz

Sample system for 2 x 16A/230V = 7.2KW (1.8KW per C19 output)

**BlueNet Power Unit
with measurement module**
Art. no. 329.9015 and 329.9010

Supply A
16 A / 400V / 50 Hz

**BlueNet Power Unit
with measurement module**
Art. no. 329.9015 and 329.9010

Supply B
16 A / 400V / 50 Hz



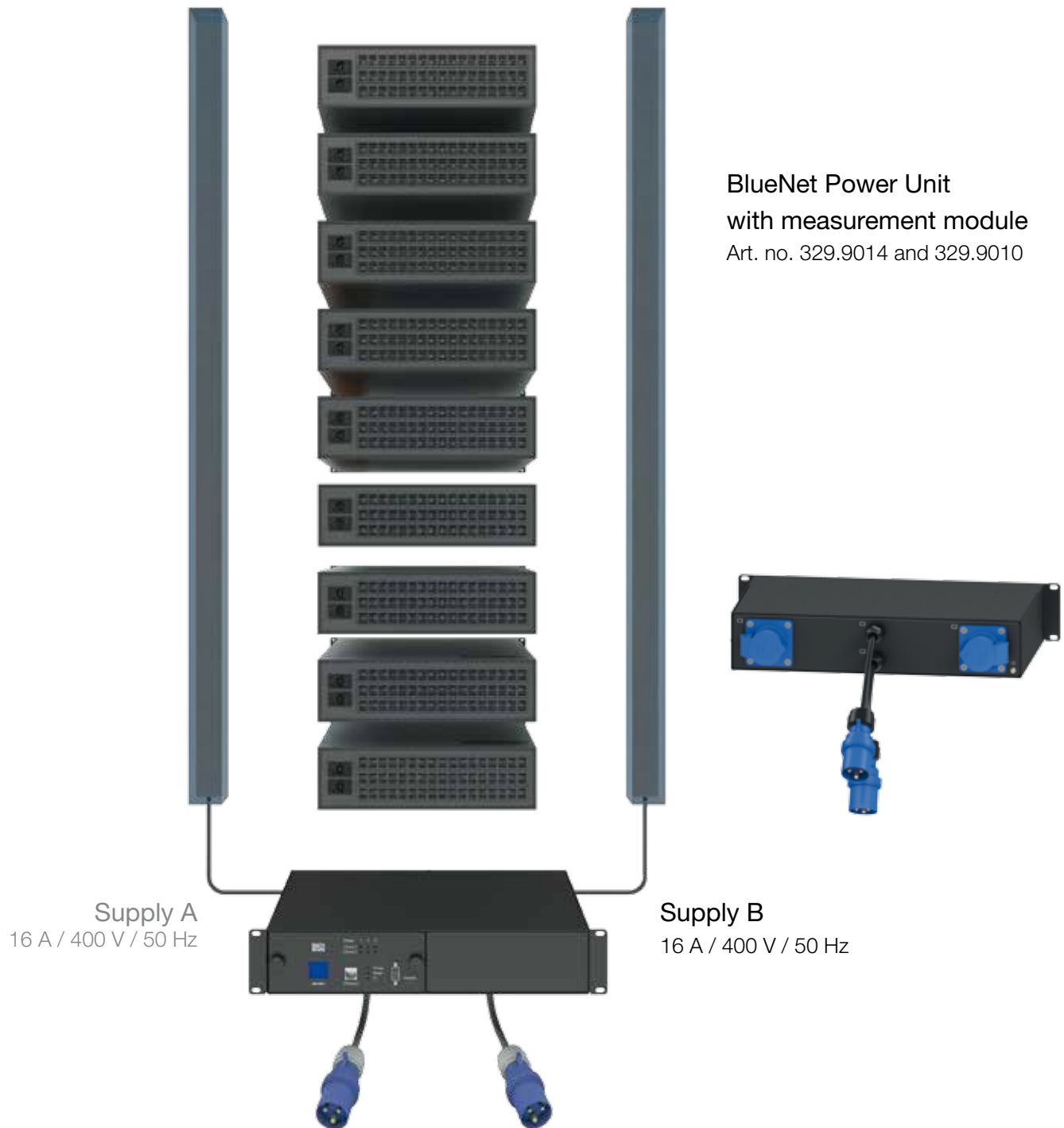
Plug-in energy distribution system including measurement module for blade systems, switches etc. with high power consumption per port. 2 x C20 inputs and 2 x C19 outputs on the rear

The advantages at a glance

- Up to four consumers can be directly connected via C19 plugs
- Ideal for combination with blade PDUs or a smaller number of servers in the rack
- Two galvanically isolated C20 infeeds, 400 V / 16 A / 50 Hz each
- Measurement module can be replaced during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

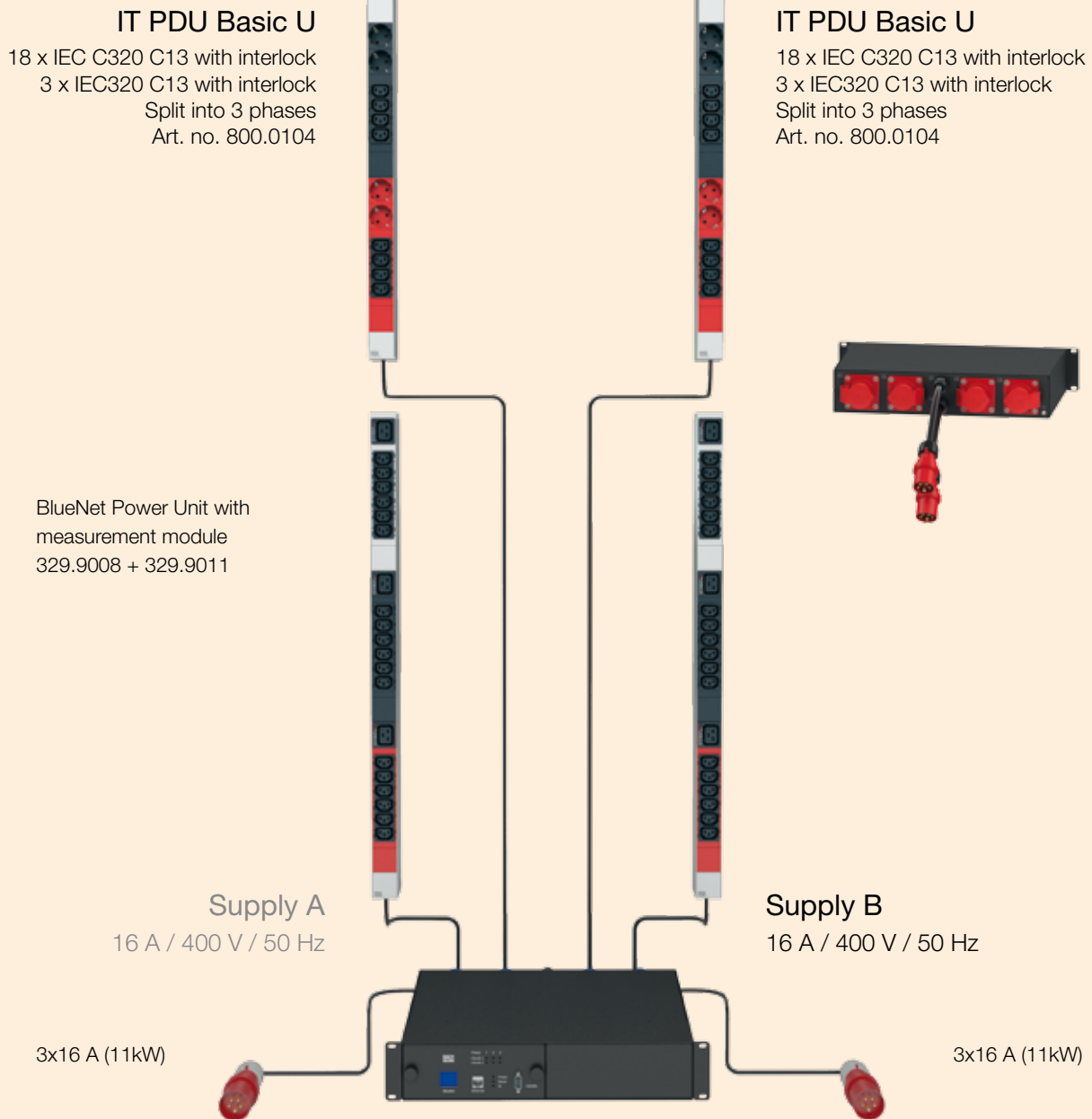
Upgrade solution

Sample system for $2 \times 16\text{A}/230 = 7.2\text{KW}$ (3.6KW per CEE output)



- Two galvanically isolated infeeds, 400 V / 16 A / 50 Hz each
- Measurement module can be replaced during operation (plug-and-play)
- Modest space requirement (2 U)
- Easy to upgrade using plug connector
- Phase-level monitoring (current, voltage, power, power factor)
- Monitoring of neutral conductor

The
advantages
at a glance



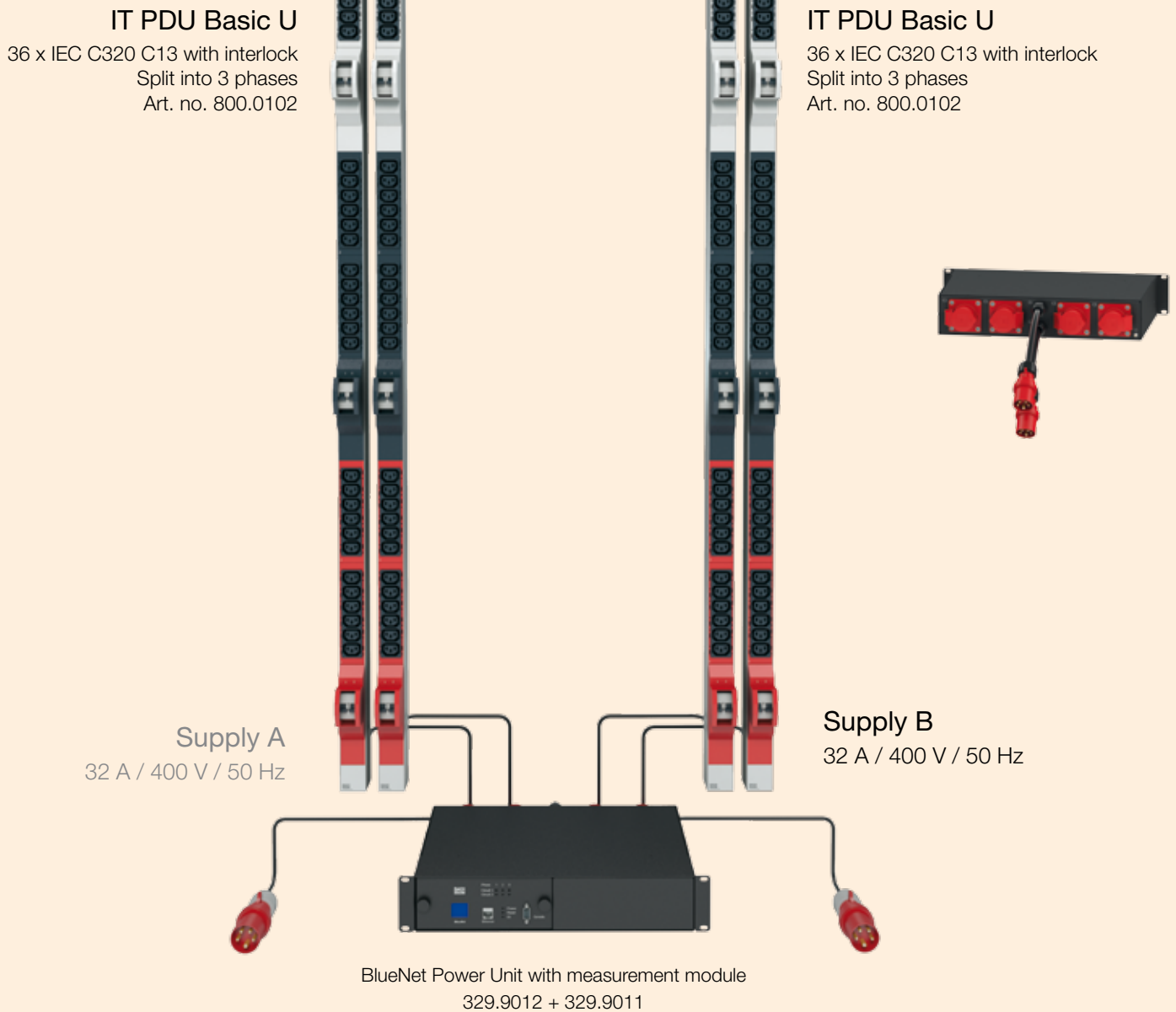
BlueNet Power Unit

16 A / 400 V / 50 Hz

Sample system for $2 \times 3 \times 16 \text{ A} / 400 \text{ V} = 22 \text{ kW}$ (5.5kW per Basic PDU)

The advantages at a glance

- Up to four consumers can be directly connected via C19 plugs
- Up to four multiple-socket outlets can be connected
- Ideal for combination with blade PDUs or a smaller number of servers in the rack
- Two galvanically isolated C20 infeeds, 400 V / 16 A / 50 Hz each
- Measurement module can be replaced during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)



Sample system for $2 \times 3 \times 32\text{A}/400\text{V} = 44\text{kW}$ (11kW per Basic PDU)

- Ideal for combination with PDUs with built-in MCB C16 A circuit breakers
- Up to four multiple-socket outlets can be connected
- Cabling and installation kept to a minimum with 400 V / 32 A supply cables
- Two galvanically isolated CEE infeeds, 400 V / 16 A / 50 Hz each
- Measurement module can be replaced during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

The
advantages
at a glance

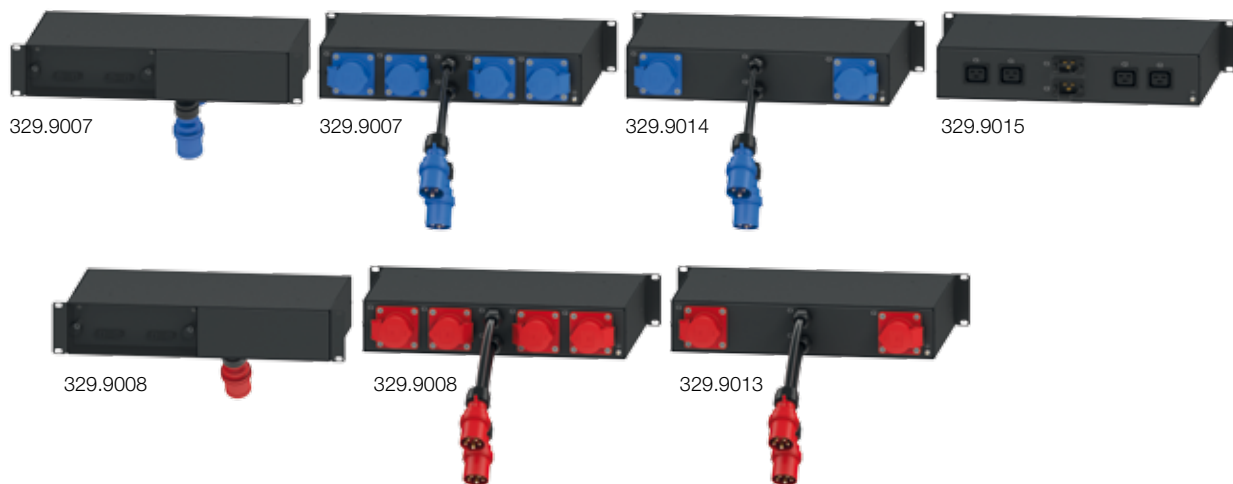


The measurement module can be replaced during use without interrupting the supply to the connected devices.



BlueNet Power Unit base unit (measurement module is available separately)

Art. no.	Input	Output
BlueNet Power Unit		482.6 x 88 x 317 mm
2 x 1 phase 230 V		
329.9007*	2 x 3.0m CEE 16 A / 230 V	4 x CEE 16 A / 230 V
329.9014*	2 x 3.0m CEE 16 A / 230 V	2 x CEE 16 A / 230 V
329.9015*	2 x C20 16 A / 230 V	4 x C19 16 A / 230 V
329.9016*	2 x C20 16 A / 230 V	2 x C19 16 A / 230 V
2 x 3 phase 400 V		
329.9008*	2 x 3.0m CEE 16 A / 400 V	4 x CEE 16 A / 400 V
329.9013*	2 x 3.0m CEE 16 A / 400 V	2 x CEE 16 A / 400 V
329.9009*	2 x 3.0m CEE 32 A / 400 V	4 x CEE 32 A / 400 V
329.9012*	2 x 3.0m CEE 32 A / 400 V	2 x CEE 32 A / 400 V



BlueNet Power Unit measurement module

Art. no.	Version
BlueNet Power Unit Monitored Plus	
with integrated Ethernet interface	
329.9010*	16 - 32 A / 230 V
329.9011	16 - 32 A / 400 V



BlueNet Power Unit set (basic unit + measurement module)

Art. no.	Input	Output
BlueNet Power Unit		482.6 x 88 x 317 mm
2 x 1 phase 230 V		
329.9001	2 x 3.0m CEE 16 A / 230 V	4 x CEE 16 A / 230 V
2 x 3 phase 400 V		
329.9002	2 x 3.0m CEE 16 A / 400 V	4 x CEE 16 A / 400 V
329.9003	2 x 3.0m CEE 32 A / 400 V	4 x CEE 32 A / 400 V

The measurement module can be replaced during use without interrupting the supply to the connected devices.

2 U high, 19" wide
(1 U corresponds to 44.45 mm)

Current, effective power, voltage, frequency, phase angle and energy can be read from the LC display on the front of the unit. LEDs indicate whether there is voltage present on each of the phases.

A built-in Ethernet port lets you export readings and set alarm thresholds via a web browser or SNMP.

Up to 12 miniature circuit breakers provide optimum protection and access in the rack itself.



BlueNet Power Unit 3 U

including integrated circuit breakers (modular)

16-32A / 230-400 V / 50Hz

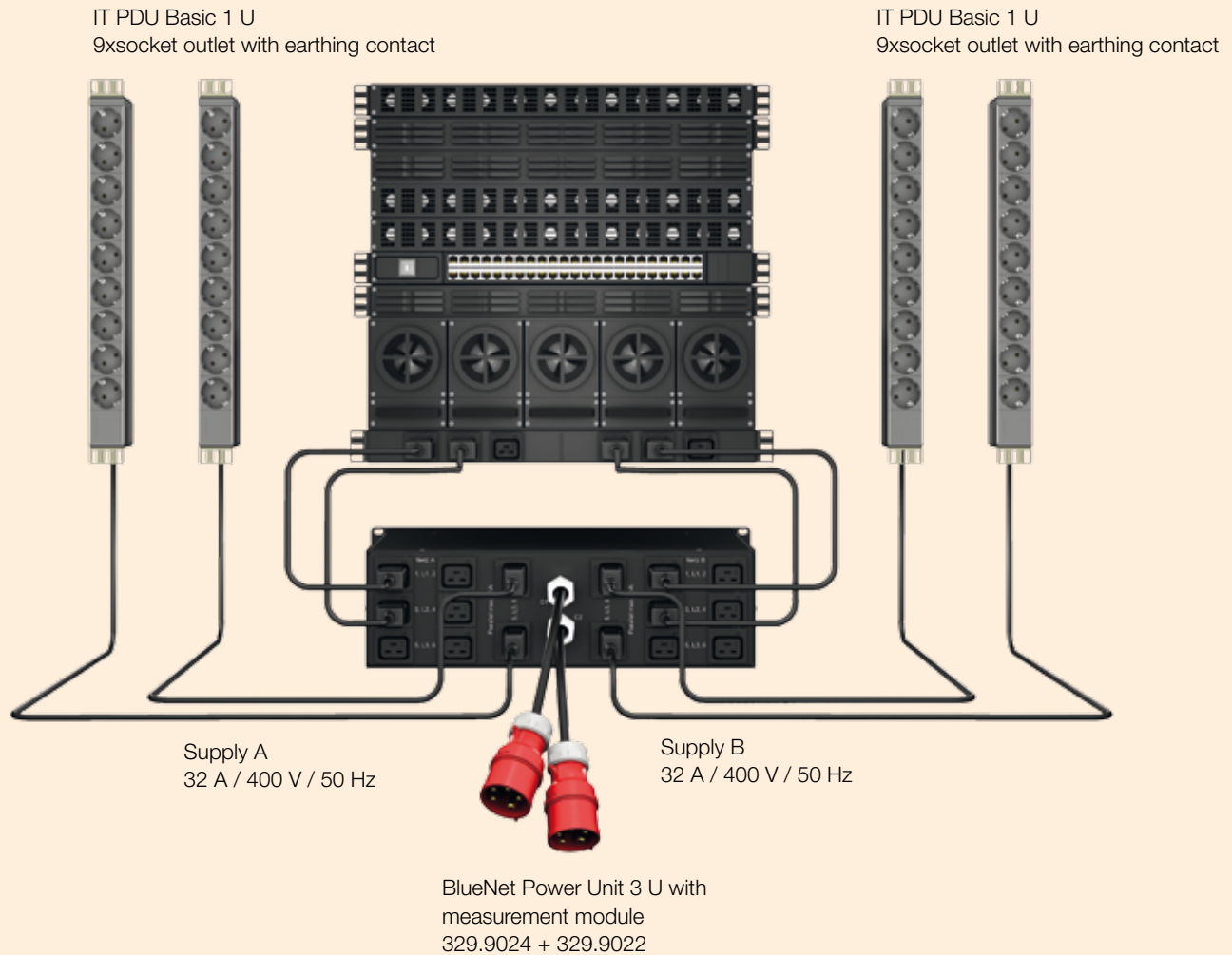


BlueNet POWER UNIT offers a modular platform for power distribution in data centres. The POWER UNIT base unit provides power distribution in the rack. If necessary, the measurement module can be retrofitted or replaced during use without interrupting the supply. Our 3 U Power Unit is a modular platform for meeting the individual needs of modern data centres.

The advantages at a glance

- 3.6 KW - 44 KW power range, 1 phase (CEE or IEC320) or 3 phases,
- Two galvanically isolated CEE infeeds (16-32A / 230-400V)
- Measurement of: Current per phase & in total, effective power per phase & in total, voltage, frequency, phase angle, energy consumption, N conductor
- Operated via web browser
- Active issuing of alarms by e-mail or SNMP Trap
- Encrypted data communication
- Protocols: HTTP, SNMP, Ethernet 10/100 MBit/s, DHCP, NTP
- Indication on illuminated, rolling LCD
- Robust 19" enclosure in steel plate
- Measurement accuracy +/- 1%
- Fused with up to 12 circuit breakers
- Integrated fuse monitoring

BlueNet Power Unit 32A / 400V / 50 Hz



BlueNet Power Unit 3 U base unit

including 12 integrated C16A miniature circuit breakers (measurement module available separately)

Art. no. | Input | Output

BlueNet Power Unit 3 U basic unit 482.6 x 88 x 317 mm

2 x 32 A / 400 V

329.9024 | 2 x 3 m CEE 32 A / 400 V | 16 x IEC320 C19 with IEC lock

BlueNet Power Unit 3 U measurement module

Art. no. | Input

BlueNet Power Unit 3 U measurement module

with integrated Ethernet interface

329.9022 | 16 - 32 A / 400 V



- Up to 16 consumers or PDUs can be directly connected via C19 plugs
- Ideal for use in the Blade Center Rack or racks which combine Blade Centers and regular servers
- Two galvanically isolated infeeds, 400 V / 32 A 50 Hz each
- Measurement module can be replaced during operation (plug-and-play)
- Phase-level monitoring (current, voltage, power, power factor)
- Ethernet interface with integral web server
- Excellent cost/benefit ratio

The
advantages
at a glance



BlueNet Monitored Inline

16-32A / 230-400 V / 50 Hz

The BlueNet Monitored Inline is an easy-to-install intelligent system for monitoring and displaying energy use. The product is particularly suited to data centres and industrial applications. The BlueNet Monitored Inline can be quickly and cheaply integrated in existing and new infrastructures using the integrated terminal block or the connection cable that has already been fitted.

The advantages at a glance

- Integrated measurement of current, voltage, frequency, effective, apparent and reactive power and power factor
- Integrated Ethernet connection
- Operated via web browser
- Protocols: HTTP, SNMP, Ethernet 10/100 MBit/s, DHCP, NTP
- Indication on illuminated, rolling LCD
- Integrated temperature sensor
- Up to two sensors can be connected (see page 55)
- Robust enclosure in steel plate
- High-resolution TFT display
- Software can be used to turn the display to make it easier to read
- Can be reconnected with terminal block
- Removable mounting plate for cable ducts or wall mounting



Designed for use in production, the BlueNet Monitored Inline series is ideal for production facilities.

BlueNet Monitored Inline

Art. no.	Phases	Voltage V	Current A	Power in kVA	from stock	Dimensions (mm)
329.3032	1	230	16	3.7	yes	232 x 104 x 102
329.3033	3	400	16	11.0	yes	232 x 104 x 102
329.3036	1	230	32	7.4	OR	232 x 104 x 102
329.3037	3	400	32	22.1	yes	232 x 104 x 102



329.3032



329.3033

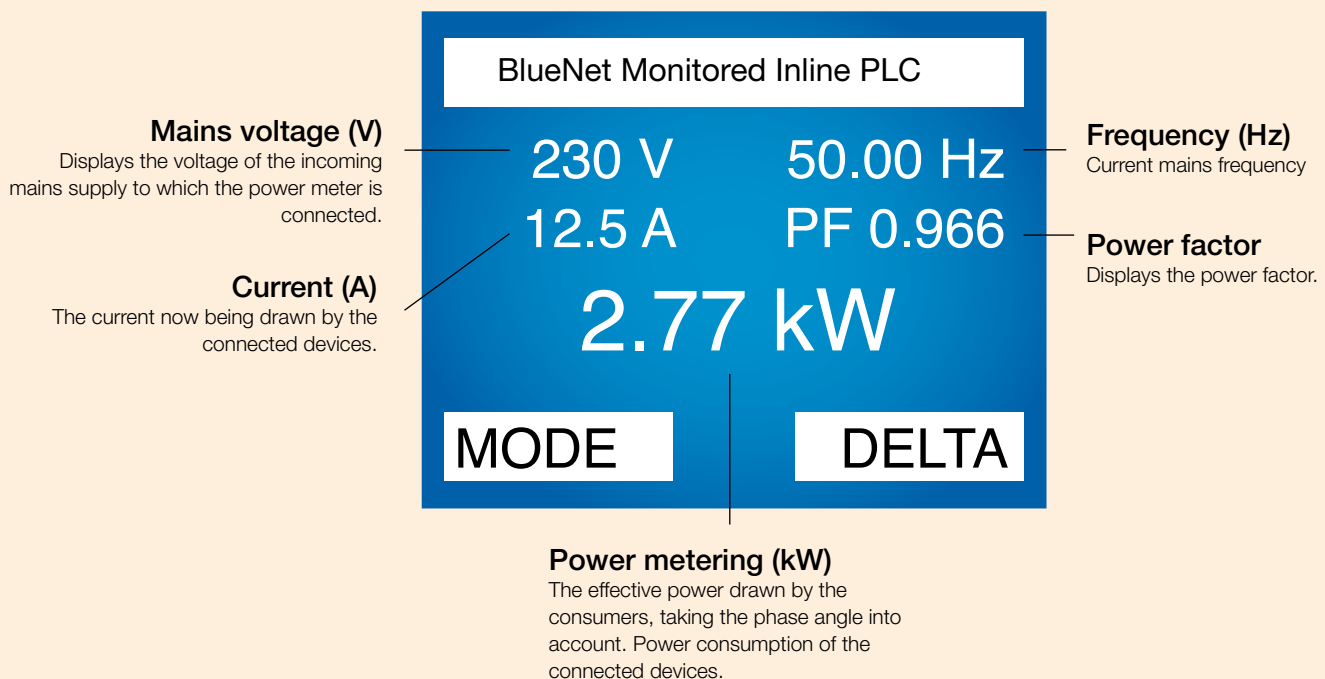
BlueNet Monitored accessories

Art. no. | Description

BlueNet Monitored accessories

329.3102	Temperature sensor 2.0 m cable
329.3104	Combined temperature and humidity sensor 2.0 m cable
329.3105	USB cable for connecting PDU directly to PC



**NEW**

BlueNet Monitored Inline PLC

(Power Line communication)

16-32A / 230-400 V / 50 Hz

The BlueNet Monitored Inline is an easy-to-install intelligent system for monitoring and displaying energy use. The product is particularly suited to data centres and industrial applications. The BlueNet Monitored Inline can be quickly and cheaply integrated in existing and new infrastructures using the integrated terminal block or the connection cable that has already been fitted.

The advantages at a glance

- Integrated measurement of current, voltage, frequency, effective, apparent and reactive power and power factor
- Integrated Ethernet connection
- Operated via web browser
- Protocols: HTTP, SNMP, Ethernet 10/100 MBit/s, DHCP, NTP
- Indication on illuminated, rolling LCD
- Integrated temperature sensor
- Up to two sensors can be connected (see page 199)
- Robust enclosure in steel plate
- High-resolution TFT display
- Software can be used to turn the display to make it easier to read
- Can be reconnected with terminal block
- Removable mounting plate for cable ducts or wall mounting
- Other mounting plates available on request.
- Powerline Communication allows measurement data to be queried via the mains supply without an Ethernet connection

For more information, see page 26

BlueNet Monitored Inline PLC

329.3060

Art. no.	Phases	Voltage V	Current A	Power in kVA	from stock	Dimensions (mm)
329.3060	1	230	16	3.7	OR	232 x 104 x 102
329.3061	3	400	16	11.0	OR	232 x 104 x 102
329.3062	1	230	32	7.4	OR	232 x 104 x 102
329.3063	3	400	32	22.1	OR	232 x 104 x 102



329.3061

BlueNet Power Line Concentrator

- The BlueNet Power Line Concentrator collects the data from the Power Line PDUs and supplies it to the network via the Ethernet interface

Art. no. | Version | from stock

BlueNet Concentrator with Power Line communications module

Assembly on 35mm DIN rail (type 0) / top hat rail

329.3016	1 phase / 230 V	OR
329.3017	3 phases / 400 V	OR



BlueNet Monitored accessories

Art. no. | Description

BlueNet Monitored accessories

329.3102	Temperature sensor 2.0m cable
329.3104	Combined temperature and humidity sensor 2.0m cable
329.3105	USB cable for connecting PDU directly to PC





IT PDU Basic 1 U

Power distribution units 230 V / 50 Hz

With its IT-PDU 1 U, Bachmann provides a huge choice of PDUs in a high-quality aluminium profile. With their extremely compact size of just 1 U in height, 44 mm in depth and 19" in width, the PDUs can be easily integrated in your IT rack.

Their multi-functional mounting brackets allow the units to be mounted in various ways (e.g. inwardly recessed). Our high quality standards ensure that the contact is reliable.

- Torsionally rigid 1 U aluminium profile, 19" format
- Up to 9 x socket inserts in the 19" format
- Flexible positioning and univ. attachment options
- The modular platform allows individual solutions to be project planned.

Versions available:

- Anodised profiles in black or grey
- End caps rivetted or rewirable
- Earthing contact and IEC320 socket outlets
- Various country versions
- Illuminated 2-pole switch
- Interlocking of IEC320 plugs
- 3-way and 12-way variants (no 19" format)
- Overvoltage protection 6.5kA
- Mains and frequency filters
- Protection with miniature fuse
- 30mA residual current device
- Miniature circuit breaker
- Master+slave function
- Socket inserts set at 35°



19" IT PDU Basic (230 V / 50 Hz)

Art. no. | Version | Colour (plastic / profile)

19" IT PDU Basic		
Without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.401	9 socket outlets with earthing contact, light grey	light grey / silver
333.506	9 socket outlets with earthing contact, light grey	black / black
333.539	9 IEC320 sockets C13 black	light grey / silver
333.616	12 IEC320 sockets C13 black	black / black
Without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with IEC320 C20 plug		
333.815	8 IEC320 sockets C19 black	light grey / silver
Without switch, without supply cable, rewirable with terminal block		
333.416	8 socket outlets with earthing contact, light grey	light grey / silver
333.830	12 IEC320 sockets C13 black	black / black
With switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.400	8 socket outlets with earthing contact, light grey	light grey / silver
333.505	8 socket outlets with earthing contact, light grey	black / black

available from stock



19" IT PDU overvoltage protection (230 V / 50 Hz)

Art. no. | Version | Colour

19" IT PDU Basic with overvoltage protection		
Without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.404	8 socket outlets with earthing contact grey	light grey / silver
333.534	8 socket outlets with earthing contact, black	black / black
With switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.405	7 socket outlets with earthing contact, light grey	light grey / silver
333.535	7 socket outlets with earthing contact, black	black / black
19" IT PDU Basic with overvoltage protection + mains and frequency filters		
Without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.402	6 socket outlets with earthing contact, light grey	light grey / silver
333.536	6 socket outlets with earthing contact, black	black / black
With switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.403	5 socket outlets with earthing contact, light grey	light grey / silver
333.537	5 socket outlets with earthing contact, black	black / black
19" IT PDU Basic mains and frequency filters		
Without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.406	7 socket outlets with earthing contact, light grey	light grey / silver

available from stock



19" IT PDU Protection (230 V / 50 Hz)

Art. no.	Version	Colour (plastic / profile)
----------	---------	----------------------------

19" IT PDU Basic with fusing

10 A miniature fuse, 2.0 m H05VV-F 3G 1.00 mm², black, with IEC320 C14 plug		
---	--	--

333.410	8 socket outlets with earthing contact, red	light grey / silver
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333.538	8 socket outlets with earthing contact, red	black / black
---------	---	---------------

10 A miniature fuse, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
--	--	--

333.408	8 IEC320 sockets C13 black	light grey / silver
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10 A miniature fuse, 2.0 m H05VV-F 3G 1.00 mm², black, with IEC320 C14 plug		
---	--	--

333.540	8 IEC320 sockets C13 black	light grey / silver
---------	----------------------------	---------------------

1 x residual current device, tripping current 30 mA		
---	--	--

333.411	6 socket outlets with earthing contact, light grey	light grey / silver
---------	--	---------------------

1 x MCB 16 A type B		
---------------------	--	--

333.412	6 socket outlets with earthing contact, light grey	light grey / silver
---------	--	---------------------

[available from stock](#)

Zero U-Space IT PDU Basic (230 V / 50 Hz)

Art. no.	Version	Colour (plastic / profile)
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Zero U-Space IT PDU Basic

Without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
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333.413	12 socket outlets with earthing contact, light grey	light grey / silver
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[available from stock](#)

10" IT PDU Basic (230 V / 50 Hz)

Art. no.	Version	Colour (plastic / profile)
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IT PDU Basic

10 ", 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
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333.417	3 socket outlets with earthing contact, light grey	light grey / silver
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333.0122	4 socket outlets with earthing contact, light grey	light grey / silver
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[available from stock](#)


19" IT PDU Master + Slave (230 V / 50 Hz)

- Once master device is shut down/switched off, automatically isolates this and all slave devices from supply
- Automatically switches on master device and all slave devices once master device has been switched on
- Integral LED indicates switching status

Art. no. | Version | Colour (plastic / profile)

19" IT PDU Master + Slave

2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact

333.407 | 1 + 4 socket outlets with earthing contact, light grey | light grey / silver

[available from stock](#)



19" fuse box (32 A / 400 V / 50 Hz)

- Space-saving option of splitting a 32 A / 400 V infeed between two 16 A / 400 V infeeds
- 6 x 16 A miniature circuit breakers, characteristic C

Art. no. | Version

19" IT PDU fuse box

Input: 32 A / 400 V CEE plug outlet: 2 x 16 A / 400 V coupling

800.0120 | 6 x 16 A miniature circuit breakers, characteristic C

[available from stock](#)

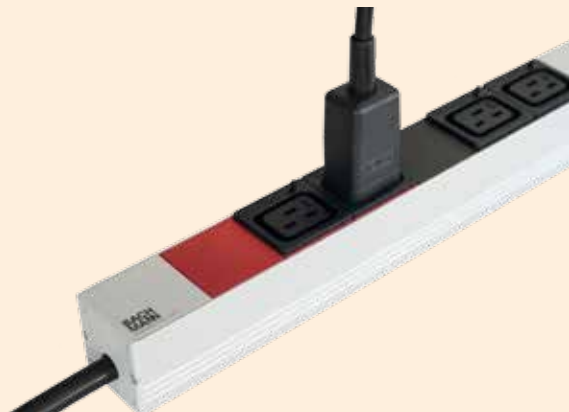


V

IEC320 C13 lockable

Two locking clips to secure two power cables.
Optimum interlocking only provided with Bachmann power cables.

Connecting cables and locking clips can be found on page 64.



IEC320 C19 with IEC lock

The IEC lock system protects computers, as servers and electrical equipment can become accidentally disconnected due to vibrations.

IT PDU BASIC 1U

Country versions

IT PDU Basic Switzerland

Art. no.	Version	Colour	Supply cable
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19" IT PDU Basic Switzerland

Without switch

800.1259	8 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0mm ² with CH plug type 12
800.1262	8 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5mm ² with CH plug type 23

With switch

800.1263	7 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0mm ² with CH plug type 12
800.1264	7 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5mm ² with CH plug type 23

19" IT PDU Basic overvoltage protection Switzerland

Without switch

800.1260	7 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0mm ² with CH plug type 12
800.1258	7 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5mm ² with CH plug type 23

19" IT PDU Basic overvoltage protection + mains and frequency filters Switzerland

Without switch

800.1261	5 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0mm ² with CH plug type 12
800.1265	5 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5mm ² with CH plug type 23

[available on request](#)

IT PDU Basic UK

Art. no.	Version	Colour
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19" IT PDU Basic UK

Without switch, 2.0 m, H05VV-F 3G 1.5 mm² with UK plug

333.804	7 x UK 90° child-proof	grey
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With switch, 2.0 m, H05VV-F 3G 1.5 mm² with UK plug

333.805	6 x UK 90° child-proof	grey
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[available on request](#)



IT PDU Basic France

Art. no.	Version	Colour
19" IT PDU Basic France		
Without switch, 2.0 m, H05VV-F 3G 1.5 mm ² with right-angled earthing contact plug		
333.418	9 x UTE socket outlets	grey
Without switch, rewirable with terminal block		
333.819	8 x UTE socket outlets	grey
With switch		
333.419	8 x UTE socket outlets + switch	grey
19" IT PDU Basic overvoltage protection France		
Without switch, 2.0 m, H05VV-F 3G 1.5 mm ² with right-angled earthing contact plug		
333.4061	8 x UTE socket outlets	grey
With switch, 2.0 m, H05VV-F 3G 1.5 mm ² with right-angled earthing contact plug		
333.838	7 x UTE socket outlets	grey
19" IT PDU Basic overvoltage protection + mains and frequency filters, France		
Without switch, 2.0 m, H05VV-F 3G 1.5 mm ² with right-angled earthing contact plug		
333.4063	6 x UTE socket outlets	grey
With switch, 2.0 m, H05VV-F 3G 1.5 mm ² with right-angled earthing contact plug		
333.840	5 x UTE socket outlets	grey
19" IT PDU Basic with fusing France		
1 x residual current device, tripping current 30 mA		
2.0 m H05VV-F 3G 1.5 mm ² with right-angle earthed plug		
333.4065	6 x UTE socket outlets	grey
1 x MCB 16 A type B, 2.0 m, H05VV-F 3G 1.5 mm ² with right-angled earthing contact plug		
333.4066	6 x UTE socket outlets	grey

available on request



PDU's > 1 U ALU

Power distribution units

- Torsionally rigid profile > 1 U (52 mm), profile depth 44 mm
- Modular socket outlet design
- Standard socket colour white; other colours black, yellow, red, brown, blue and green also available
- Optionally includes illuminated 2-pole switch
- High-quality electronics components built in, e.g. overvoltage protection, mains and frequency filters
- Mounting brackets included

End caps riveted and do not open



Power input: 2.0 m, H05VV-F 3G 1.50 mm² grey, with moulded right angle plug with dual earthing contact system, sockets white, set at 35°, mounting brackets included

Art. no. | Version

19", 8 x earthing contact **Length: 440 mm**

333.001 | 8 socket outlets with earthing contact, white

19", 7 x earthing contact **Length: 440 mm**

1 x switch, green

333.000 | 7 socket outlets with earthing contact, white
· Green switch

19", 7 x earthing contact **Length: 440 mm**

1 x overvoltage protection

333.004 | 7 socket outlets with earthing contact, white
· Overvoltage protection

19", 6x earthing contact **Length: 440 mm**

1 x overvoltage protection, 1 x switch, green

333.005 | 6 socket outlets with earthing contact, white
· Green switch
· Overvoltage protection

19", 5 x earthing contact **Length: 440 mm**

1 x overvoltage protection + mains and frequency filters

333.002 | 5 socket outlets with earthing contact, white
· Overvoltage protection + mains and frequency filters

19", 4 x earthing contact **Length: 440 mm**

1 x overvoltage protection + mains and frequency filters, 1 x switch, green

331.0202 | 4 socket outlets with earthing contact, white
· Green switch
· Overvoltage protection + mains and frequency filters

[available from stock](#)



PDU's > 1 U PVC

Power distribution units

- Torsionally rigid profile > 1 U (52 mm) in high-quality PVC, profile depth 44 mm
- Optionally includes illuminated 2-pole switch
- High-quality electronics components built in, e.g. overvoltage protection, mains and frequency filters
- Mounting brackets included

End caps riveted and do not open 

Power input: 2.0 m, H05VV-F 3G 1.50 mm², grey, with moulded right angle plug with dual earthing contact system, sockets light grey RAL7035, set at 35°, mounting brackets included

Art. no. | Version

19", 8 x earthing contact Length: 440 mm

333.601 | · 8 socket outlets with earthing contact

19", 7 x earthing contact Length: 440 mm

1 x switch, green

333.600 | · 7 socket outlets with earthing contact
· Green switch

19", 7 x earthing contact Length: 440 mm

1 x overvoltage protection

333.604 | · 7 socket outlets with earthing contact
· Overvoltage protection

19", 6x earthing contact Length: 440 mm

1 x overvoltage protection, 1 x green switch

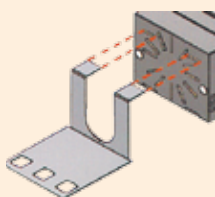
333.605 | · 6 socket outlets with earthing contact
· Green switch
· Overvoltage protection

19", 5 x earthing contact Length: 440 mm

1 x overvoltage protection + mains and frequency filters

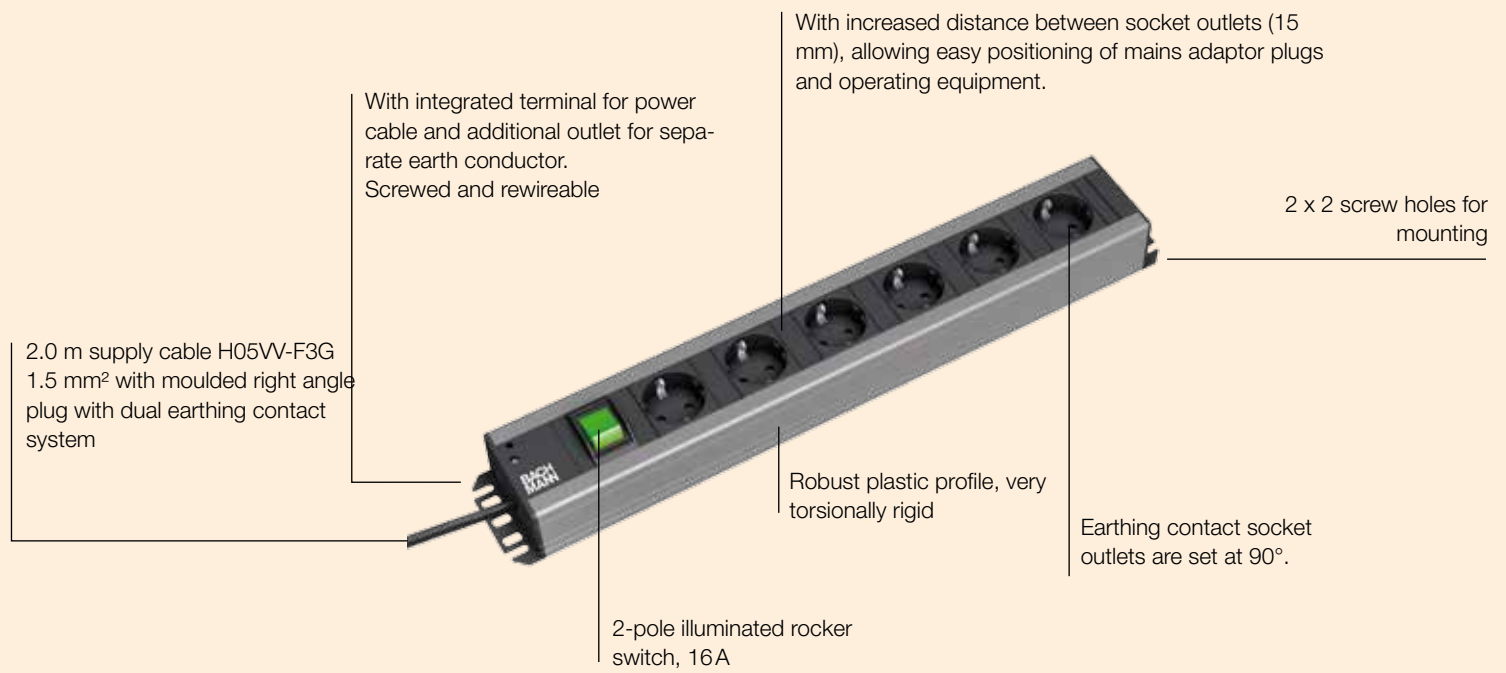
333.602 | · 5 socket outlets with earthing contact
· Overvoltage protection + mains and frequency filters

[available from stock](#)



Stainless steel mounting bracket:

Fastening in the slots of the end cap enables the unit to be fitted at various heights and angles.



With increased distance between socket outlets, allowing easy positioning of mains adaptor plugs and operating equipment.



The advantages at a glance

- End caps with additional screw holes for mounting in data racks
- Additional earth conductor can be connected without opening the housing
- PDUs in 19" dimensions available
- Modern, technical design

2 U PDU set at 90°



- Supply cable: 2.0 m H05VV-F 3G 1.50 mm², black with right angle plug with earthing contact
- Socket inserts, black, 15 mm spacing between sockets

Art. no. | Version | Dimensions: (L x W x H)

Power strip 90°

Without switch

300.000	· 6 socket outlets with earthing contact	· Approx. 445 x 74 x 45 mm
300.001	· 9 socket outlets with earthing contact	· Approx. 617 x 74 x 45 mm
300.002	· 12 socket outlets with earthing contact	· Approx. 790 x 74 x 45 mm

19"



1 x rocker switch, green

300.003	· 6 socket outlets with earthing contact	· Approx. 445 x 74 x 45 mm
300.004	· 9 socket outlets with earthing contact	· Approx. 617 x 74 x 45 mm
300.005	· 12 socket outlets with earthing contact	· Approx. 790 x 74 x 45 mm

19"



1 x overvoltage protection, 1 x rocker switch, green

300.011	· 6 socket outlets with earthing contact	· Approx. 490 x 74 x 45 mm
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1 x overvoltage protection + mains and frequency filters, 1 x rocker switch, green

300.012	· 6 socket outlets with earthing contact	· Approx. 575 x 74 x 45 mm
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19"

[available from stock](#)**Overvoltage protection with filter**

Overvoltage protection – conforms to EN 61643-1:2005, EN 61643-11:2002 + A11:2007, type 3, discharge current 6.5 kA, response time < 25 nS. Suitable for 16A (miniature fuse on request) with varistors, temperature fuse, gas discharge arrester, visual LED function and failure indicator (acoustic signalling also available on request).

Mains and frequency filters conforming to VDE 0565-3:05-2006, damping diagram on data sheet.

2 U PDU set at 35°



- Supply cable: 2.0 m H05VV-F 3G 1.50 mm², black
- Screwing dimension 465 mm, socket outlets set at 35°

Art. no. | Version | Dimensions: (L x W x H)

Power strip 35°

Without switch

300.006	· 8 socket outlets with earthing contact	· Approx. 482.6 x 74 x 45 mm
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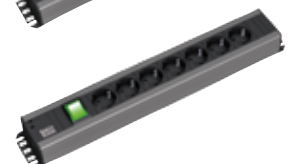
19"



1 x rocker switch, green

300.007	· 7 socket outlets with earthing contact	· Approx. 482.6 x 74 x 45 mm
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19"

[available from stock](#)

Accessories

Mounting brackets for standard 1 U profile

- The brackets are screwed to the PDU end cap using a screw connection (screws provided).



Art. no. | Version

1 U mounting brackets

19", Zero-U Space

940.142 | · Mounting brackets left and right

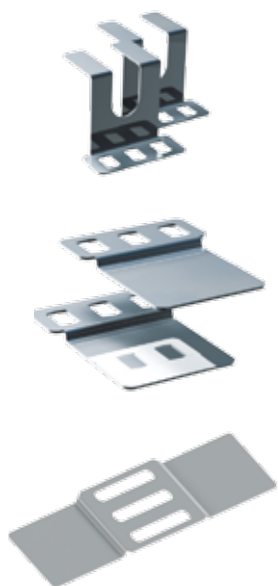
> 1 U mounting brackets

19", Zero-U Space

940.096 | · Mounting brackets left and right

Mounting brackets for VM profile variant / Zero U-Space installation

- Power strip is fixed by insertion into the profile groove provided.
No additional screws required.



Art. no. | Version

1 U mounting brackets

19", Zero-U Space

940.141 | · Mounting brackets left and right

1 U mounting brackets

Zero-U Space

940.143 | · Mounting brackets left and right

1 U link

Zero-U Space

800.0053 | · For connecting two vertically fitted PDUs

Locking clip



Art. no. | Version

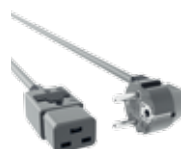
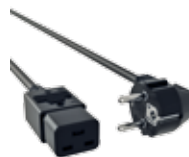
Locking clips

940.103 | · Red locking clip for IEC320 appliance socket outlets C13, supplied in packs of 12.



Cables in various colours to distinguish between power supplies

Art. no.	Cable colour	Cable cross-section mm ²	Cable length (m)	Plug	Coupling
356.119	black	1.0	0.50	C14	C13
356.169	black	1.0	0.75	C14	C13
356.120	black	1.0	1.00	C14	C13
356.170	black	1.0	1.50	C14	C13
356.171	black	1.0	2.00	C14	C13
356.172	black	1.5	0.50	ECP*	C13
356.1721	black	1.5	0.75	ECP*	C13
356.1722	black	1.5	1.00	ECP*	C13
356.1723	black	1.5	1.50	ECP*	C13
356.1724	black	1.5	2.00	ECP*	C13
356.1731	black	1.5	0.50	C20	C19
356.1732	black	1.5	0.75	C20	C19
356.1733	black	1.5	1.00	C20	C19
356.1734	black	1.5	1.50	C20	C19
356.1735	black	1.5	2.00	C20	C19
356.1971	black	1.5	0.50	ECP*	C19
356.1972	black	1.5	0.75	ECP*	C19
356.1973	black	1.5	1.00	ECP*	C19
356.1974	black	1.5	1.50	ECP*	C19
356.1975	black	1.5	2.00	ECP*	C19
356.900	grey	1.0	0.50	C14	C13
356.901	grey	1.0	0.75	C14	C13
356.902	grey	1.0	1.00	C14	C13
356.903	grey	1.0	1.50	C14	C13
356.904	grey	1.0	2.00	C14	C13
356.905	grey	1.5	0.50	ECP*	C13
356.906	grey	1.5	0.75	ECP*	C13
356.907	grey	1.5	1.00	ECP*	C13
356.908	grey	1.5	1.50	ECP*	C13
356.909	grey	1.5	2.00	ECP*	C13
356.910	grey	1.5	0.50	C20	C19
356.911	grey	1.5	0.75	C20	C19
356.918	grey	1.5	1.00	C20	C19
356.935	grey	1.5	1.50	C20	C19
356.936	grey	1.5	2.00	C20	C19
356.937	grey	1.5	0.50	ECP*	C19
356.938	grey	1.5	0.75	ECP*	C19
356.939	grey	1.5	1.00	ECP*	C19
356.940	grey	1.5	1.50	ECP*	C19
356.941	grey	1.5	2.00	ECP*	C19





Locking cap IEC320 C13 & C19

Art. no. | Version

Connecting cable for interlock

800.0050	C19 locking caps, 10 items incl. unlocking tool
800.0051	C13 locking caps, 10 items incl. unlocking tool
800.0052	Unlocking tool for locking cap

RackFix tool-free mounting on 19" rail

- Self-locking fixing connector for tool-free fastening of PDUs in 19" rack



Art. no. | Version

RackFix tool-free rack fastening

940.166	Fixing clip, supplied in packs of 50
940.167	Disassembly tool for fixing clip

Shift inhibitor

- To protect against unintentional actuation of miniature or residual current circuit breakers

Art. no. | Version

Shift inhibitor

940.140	Actuation lock for circuit breakers and switches, 1 pole, to protect against unauthorised or dangerous activation of the switch lever
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Data cables → Transfer of data within various categories

Art. no.	Length	Version
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CAT5e patch cable plug/plug

918.003	1.0 m	CAT5e cable, shielded, colour grey
940.052	3.0 m	Conforms to ISO / IEC 11801 and EN 50173
940.053	5.0 m	Ends 1 and 2: RJ45 plug with kink protection nozzle and protective tongue for interlock Suitable for e.g. CAT5e socket / socket 940.057

**CAT6 patch cable plug / plug**

940.040	3.0 m	CAT6 cable, shielded, colour grey
940.041	5.0 m	Conforms to ISO / IEC 11801 and EN 50173 Ends 1 and 2: RJ45 plug with kink protection nozzle and protective tongue for interlock Suitable for e.g. CAT6 socket / socket 940.044

**CAT6a patch cable plug / plug**

918.006	1.0 m	CAT7 cable, shielded, colour black
918.007	3.0 m	Conforms to IEC 61156-6
918.008	5.0 m	Ends 1 and 2: RJ45 Hirose TM12 CAT6a plug with kink protection nozzle and unlocking tongue Suitable for e.g. CAT6 socket / socket 940.044

**CAT6a patch cable plug**

918.033	3.0 m	CAT7 cable, shielded, colour black
918.034	5.0 m	- Conforms to IEC 61156-6 - End 1: RJ45 Hirose TM12 CAT6a plug with kink protection nozzle and unlocking tongue. End 2: CAT6a TKM 10 GB keystone socket. Fits into Keystone frames 917.000 / 917.001 / 917.061 / 917.062

**RJ12 patch cable plug / plug**

940.089	3.0 m	RJ12 cable, unshielded, colour black Conforms to ISO / IEC 11801 and EN 50173 Ends 1 and 2: RJ12 plug with kink protection nozzle Suitable for e.g. RJ12 socket / socket 940.085
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